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Life Happens to All, Only Few Make it Happen

Jayant Nahata, IAS (AIR 56 CSE 2020)

Back in 18th century, there existed a sleepy town in the hinterland of present day U.S.A. The family by the name of Franklin had seven children with one particular short stature boy who was the youngest of the seven children.

The boy struggled with his limited means, received education in a local school and was often teased by his friends. But he was not like any other.

He possessed a kind of perseverance and passion few around him knew. At the day's end, he would open his diary, record his good habits and bad habits, during the day like reading books, showing punctuality, being humble etc. that he would sleep with resolve to make the next day better.

Throughout his adult phase, as he struggled with odd jobs like a newspaper printer, he never forgot to improve and learn each day. He grabbed an opportunity, expanded his networks and self-taught himself.

Slowly, he gained membership of legislature of American state, his scientific papers got published and he jumped into the American Revolution related activism and emerged as the tallest leader and father of Modern America. His name was Benjamin Franklin!

Thus, despite odds and circumstances, he built himself and made life happen! Not just for himself, but for his country!

Though, life in the form of birth happens to all humans, why are there only few Benjamin Franklin, Gandhi, Teresa? Does life happens to all truly?

We may argue that not all are fortunate to get a life worthy of its name. Some are unlucky and born as differently abled. Some lives are ended in the wombs by foeticide and some female children face the horror of infanticide by their unwilling parents.

Even after crossing the hurdles of mortality, not all get life in equal measure. Economic survey 2017-18 talks of "unwanted girls" born due to son-meta preference and thus facing neglect in education, nourishment and career.

Debt often leads to bonded labour and trafficking where freedom of an individual which is basic essence of human life is snatched away.

The present day ad-industry has its own way of curbing true choice by developing false needs of goods and values.

But the inspiring stories of Helen Keller (differently abled), Indira Gandhi (female), Rajnikanth (earlier a bus conductor) show how few individuals brave all circumstances in their way to truly make their life happen.

Life happens when one achieves individual success, pride, respect and glory. Life also happens in enabling the other individual by empowering him.

Stalwarts of fame made not only their life happen, but brought prosperity to an entire nation or steered the world to a better path.

History holds important lessons and is often told in reference of individuals such as Mauryan Empire, BC era as Before Christ, Gandhian phase of independence movement and so on. This shows their importance as "guiding light" to human race.

The lives of Gautama Buddha and Mahavira made life happen by wondering and contemplating the "Truth" to make society peaceful.

Traits define such great figures. Lincoln for example, showed festitude while engaging in the emancipation and the proclamation to outlaw slavery.

Mother Teresa had utmost empathy for diseases (leprosy patients for example). Gandhi, Martin Luther King and Mandela showed awe inspiring, leadership skills to sway masses towards the road to freedom.

Administrators like E. Sreedharan gained the repute of 'Metro Man' due to his sincerity and no non-sense attitude.

On the other end of the spectrum, the prodigies like Da Vinci and Picasso were gifted with 'creativity' while Einstein had an 'IQ' few could match. This led all these individuals to make life happen!

The common thread roaming through all such stories is the existence of a positive attitude towards life, perseverance and hard work and passion to achieve a noble vision.

However, what makes the other 99% fail to make life happen?

One may attribute it to genetic traits (such as high IQ of Einstein) not favourable as nature is random.

Others may agree that dire circumstances such as extreme poverty, birth in a black family or low caste or hindered by geography such as North-Eastern religion.

True, is there a 'level playing field' between an American white male born to Bill Gates and an Africa black female born in war torn Sudan?

On the other hand, it's equally true that 'making life happen' is no reserved for only few individuals who gain limelight.

A poor man toils throughout the day in the agricultural field with utmost honesty to make two meals possible and to get his children educated. Isn't he making life happen in his own way? Are soldiers on the borders or security guards at the colony gates not enabling others to make life happen?

Needless to say, some achieve more than others and for the right reasons. So it's prudent that the individuals learn from history and try to imbibe positive traits and methods to achieve similar results. Only then will society move towards the path of success.

Firstly, individuals need to gain objective understanding of their reality, their strengths and weakness. Then, they can begin developing positive habits.

As Benjamin Franklin said:

"Excellence is not an Act, It's a daily habit"

The role of states is very crucial to remove the external and internal impediments facing the citizens. The state should build capacity via investments in education, health, infrastructure, skills etc. The case of South Korea where 94% of citizens are skilled leading to prosperity and housing corporate giants like Samsung and LG proves that state has crucial role to make life happen to its citizens.

However, civil society and corporates have to share the burden equally with the state. Bill and Melinda Gates foundations exemplary work in Africa in fight against HIV proves that individuals who've made life happen to themselves can extend the helping hand to others left behind for society to progress as a whole.

Corporates need to reform their internal functioning to blur the 'glass ceiling' and give equal opportunity to all people to make good out of their lives. They have a role in environmental management and sustainable development for long term vitality of Earth.

The combined efforts of all actors will lead to true meaning of life unfolding for most in our society. With each individual outdoing herself/himself, expanding his frontiers of excellence and gaining success, the whole society will prosper. Life then will truly happen to all and all will be capable enough to make life happen to themselves.

"In the stirring lies the success"

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5 Nothing is Absolute, Subjectivity Applies Everywhere

Jayant Nahata, IAS (AIR 56 CSE 2020)

"There are no absolute truth... What we need is incredulity towards Meta-narratives".
–Lyotard

Lyotard was a post-modern scholar of fame. He warned of the dangers of sweeping generalisations and absolute ideologies instead calling for anti-foundationalism and anti-universalism.

But why was Lyotard so against absoluteness? Is nothing really absolute? Let's find out!

Absolute truths are those ideas, values, statements and beliefs where humans or society reposes blind faith and total acceptance.

For example, God is considered the highest authority according to most religions.

Subjectivity on the other hand implies difference of opinion and perspective on similar issues. The classic example is the "half-glass full" vs "half-glass empty" anecdote.

All through history there have been some or the other universal dogmas or beliefs that is, ideologies which have been used to articulate one's perspective and mobilise people around it.

While the Christians waged crusades in defence of their absolute belief in sayings of Bible, modern day world sees Jihad by extremist from Islam as waging wars to create an "Imagined Caliphate" in West Asia.

This absoluteness thus sparks conflicts between individuals, societal actors like corporates vs. government, between nations and clash of civilisation.

An individual's absolute trust on his argument during a road accident gets inflated into road rage killings/violence. A community's trust in its own superstitious beliefs/orthodoxy gets translated into our newspaper headlines talking of Khap panchayat sanctions, honour killings, witch huntings in Manipur etc.

Similarly, at the border, varying perceptions of the line of control results into ceasefire violations and killings of civilians/army men.

Thus, absoluteness of any kind seems to be causing weakening of social fabric and disharmony in the world.

Even Foucault, the great scholar of our times has analyzed ideologies and rejects absoluteness or discourses. He argues that there are no universal principle. We live in a social world where truth isn't discovered, its fabricated. Nietzche famously said that "God is dead" and there is no universal morality.

This can be analyzed even in various walks of life.

Subjectivity persists in religious beliefs while Jainism/ Buddhism preach against superiority of Vedas, Hinduism considers it sacred. The caste system has been interpreted by Manusmriti as "Dharma" or part of natural order while Ambedkar called for "putting dynamite" on the very same scripture. The concept of gender is also not absolute – ask a rural poor illiterate women and she would justify domestic violence by her husband in all probability.

Society has deep inter-linkages with polity. Though the world was divided into two absolute blocs of liberal west and Communist Soviet Union during cold war, its end led to Francis Fukyama clamming the "End of History" as liberalism as an ideology won. However soon, this absoluteness was challenged by rising Asian states, Islamic fundamentalism seen in 9/11 terror attacks and resurgence of Russia and China.

Democracy which is often considered the best political system is challenged by statesmen like Lee Kuan Yow who called it a "Western Obsession". Even during the inter-war period, whatever fascists like Hitler did was absolutely justified from their perspective but roundly condemned by the international community.

The current globalisation face is deeply contended for its impact – some argue that it has led to "Plutocracy" (Ramesh Thakur) some others like Jagdish Bhagwati cite declining poverty in China from 36% to 6% (1990-2016) as evidence of its virtues. Thus, subjectivity prevails here too.

But why then is absoluteness across spheres existing?

Gramsci, the contemporary of Mussolini, puts blame on hegemony or soft power which is manufactured by the elites in the society. The ad-industry is making human "One Dimensional Man". While consumerism and materialism is being projected as the absolute goals, it's leading to false consciousness.

Moreover, Human by nature is a social animal and tends to defend his long cultivated social beliefs.

Thus, the society in ancient Sparta glorified war even though peace/love are considered universal traits in modern world.

The reason for such absoluteness may lie in the pursuance of 'Power". There is a knowledge-power connection. Every theory is said for some purpose and by some person. So, Brahminical superiority was maintained via caste rigidity and even the Britishers maintained "White Man's Burden" theory to justify their rule over India.

But is the skepticism towards all that is absolute correct? All of us may agree on certain absolute principles such as empathy, love and peace. These are hard-wired in us from birth. Gandhiji considered non-violence as the "Absolute creed" for which he suspended the Non-cooperation movement post-Chauri-Chaura.

Similarly, human rights such as right to life, freedom of speech and equality are moral guarantees in most culture/political systems.

Absoluteness is rooted in scientific theories. Science tells about truth and false. We are all made of carbon, any doubts?

However, even the staunchest science theorist will agree that even science goes for constant revisions in postulations.

Newton's theory was revised by Galileo. Even the rebuked concept of black hole was defied with the Messier 87 photograph recently.

Now since, there is no absoluteness or minimal absoluteness, given the negative impacts (violence, conflicts, etc.) that we saw, how can individuals, society, nations come to terms with subjectivity. Is the term "Vasudhaiva Kutumbakam" totally elusive given the subjectivity in opinion and perspective?

The world need to accept the fact that subjectivity exists. Without accepting the issue, we won't be able to deal with it.

Once, there is widespread agreement on this 'fact that there's no absolute fact', there needs to be cultivation of toleration and acceptance of the other. Tolerance isn't weakness. It represents the strength of one's personality and openness to new ideas which enriches all cultures.

India is the 'guiding light' of the world as it has managed to accommodate diversity of unimaginable proportions under a single national identity.

Education institutions should profess 'value pluralism' i.e. acceptance of existence of equally right value which might seem conflictual. On the other hand, there also needs to be 'intolerance 'against evils such as violence, discrimination, hate, crimes etc.

Multi-culturists' idea need to be adopted by political system to solve the minority issue and refugee crisis. There needs to be more democratic sphere where people interact with each other and resolve conflicts. Only with exchange of ideas and more communication our societies/culture would flourish else even the romans saw their empire crumbling due to dogma.

Religion has taught of 'anekantavada' and "Middle Path" to avoid extreme to get harmony in society. Let's all unite by our acceptance of subjectivity rather than fight on the existence of absoluteness. The world of today presents equally truthful idea/values/ideologies. We can all move together in the "search of truth" by accepting each other's perspectives and leaving behind dogmas.

The day then is not far when the utopianism of 'Vasudhaiva Kutumbakam' will convert into reality.

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6 People Decide Their Own Destiny, Fortunes are Made or Unmade by Humans

Jayant Nahata, IAS (AIR 56 CSE 2020)

The year was 1945…at the end of a gruesome world war, the international leaders decided to crave up the Korean peninsula along the 38th parallel. Though the two Koreas – North and South started from the same ravages and deprivations, the people of South Korea chose to alter their destiny forever! With massive investments in education, health, skilling, infrastructure and sheer dedication and will of ordinary men and women, the karma of the people finally showed fruit.

South Korea entered the club of "Asian Tigers" with 10% plus GDP growth rates for more than 30 years. It shrugged off poverty and ensured that South Koreans emerged as one of the most prosperous and technologically advanced countries in the world. Shifting to the north of the parallel, the misdeeds of authoritarian leaders and missed priorities have led to deprivation of basics like food and threatens nuclear showdown with USA.

Who says fortunes are pre-decided in heaven? Even the palm develops those fortune lines only because the palm is closed into a fist in the womb! Thus indicating that fortunes are made by Karmas and people chart their own destiny! But there's more to it that what meets the eye. Let's analyse how Karmas defines the fortunes good or bad. Whether there are exceptions to this generalisations? And how should we brace for the path ahead?

The phrase "what you sow, so shall you reap" beautifully and precisely captures the essence of Karma theory. Truly, the fruits of one's handwork and labour come one day or another. Thomas Alva Edison's untiring efforts and repeated failures, finally led him to the invention of the "light bulb"!

Karma is equally dangerous when put to negative use. The fortunes of Satyam Company evaporated with legal and ethical lapses on the part of its management. Similarly, one resorting to fatalistic thinking .i.e. everything is pre-decided more often than not see stagnation in their life or downturn. The lack of adaptation measures once brought the famed Harrapan Civilization to ruins with massive floods! History definitely has lessons to teach, but we can ignore it into our own peril!

The great philosophical thinker and realist, Machiavelli remarked that fortunes or bad luck can arrive to the doors of anyone, but it's only the prepared one who brave the storm. Luck is when preparation meets opportunity!

In 1999, the super cyclone in Odisha killed 12,000 people and damaged billions worth of property, but learning from it, the people and state did their "Karma" of establishing early warning systems, training state disaster response forces and developed protection infrastructure. Zoom to 2016, the cyclone Phailin with similar destructive potential caused just 40 odd casualties (although still unfortunate)!

One of the top "fortune 500" companies Amazon is the result of innovation and perseverance of its founder Jeff Bezos who braved the monopolistic giants like Walmart and charted his destiny to the top! Good karmas see a mixture of great handwork and perseverance guided by the values of altruism, compassion, love and integrity. It involves the ability to brave the daily failures and to literally chart way through mountains as the stories of Amazon, South Korea etc. demonstrate.

Bad Karmas can similarly upturn the fortunes. Ultra-nationalism and "Aryan theory of supremacy" led to Hitler's eventual defeat at the end of second world war. Napoleon's greed and dominating instincts caused him his biggest loss at Waterloo. Even during the Indian freedom struggle, the Britishers' wrongs and oppressions collided with Gandhi's truth and non-violent karma of satyagraha and saw the downfall of history's greatest imperial power!

Karma in the wrong direction can possibly evade the envisioned destiny. Trying to use outmoded technologies in agriculture and faulty policies such as skewed MSP (Minimum Support Price) literally led to "reaping what was sowed".

However, generalisations of sweeping return often hide more than they reveal. Despite human will certain structural factors may still prevent translations of Karma into destiny. In the case of women across the world, the social rule of patriarchy and male domination have shackled their growth story. Only a few likes of Sheryl Sandberg or Indira Nooyi have managed to create a place at the high tables of corporate world. Some holds true for politics where only 12 women leaders headed their countries in 20th century.

Similarly despite good karmas, such as adaption and rescue, millions lose their lives to disasters still! Super power rivalry led to proxy wars in disparate countries such as Cuba (Cuban Missile Crises of 1962) who were unwilling to get sucked up in militarisation.

But one may argue also that seemingly out of control factors like natural disasters or say biological parameters also lose their relevance in the face of grit and unbending attitude. Lionel Messi's short statures denied him bright prospects in football league but he crafted his destiny himself. He famously remarked – "after 17 years of hard work, I have now become an overnight success" – as he accepted his consecutive 'Ballon d'Or "Best Football Player" award!

Humanity will benefit if it takes cue from the essence of Bhagavad Gita which is "Nishkam Karma". As the Mahabharata's climactic battle was yet to start, Krishna asked the perplexed Arjun to "do his duty" without caring for the fruits.

Men and women should realise that only with efforts are the paths to prosperity and happiness created. There's no easy way out. The state should similarly do its "karma" of capacity building of its own population to brace for a fast changing word of 21st century. At the global level, nations should understand the collective future of humanity is linked. The efforts or Karma shouldn't breed exclusion and inequalities between west-east or global North-South, rather endeavour towards common good should be made. Let us all unite to realise our "tryst with destiny" using the power of Karma!

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Science is a Beautiful Gift To Humanity, We should not Distort it

Jayant Nahata, IAS (AIR 56 CSE 2020)

Yuval Noah Harari in his book "Sapiens" describes the brief history of human kind. Humans through the ages have advanced side by side as their scientific knowledge expanded. The discovery of "language" ushered in the "Cognitive Revolution"; "fire" discovered 1,00,000 years back kickstarted new mode of hunting and cooking finally leading to "agricultural Revolution"(1,00,000 years back). But the world was upturned with the ushering of "scientific revolution" from 15th century A.D. onwards!

From the printing to compass, the science of "mapping" (cartography) to spinning jenny and steam engines, (wo)mankind learnt to translate its scientific process into tangible technological developments. This opened up new trade routes, ushered communication revolution, kick- started Industrial Age while the 20th century internet made "Vasudhaiva Kutumbakam" a reality! Science definitely turned out as the most beautiful gift of humanity: it eased life, helped combat diseases via new age vaccines and put a serious dent on poverty and accelerated economic growth.

But a parallel script was being written. The man's inner devil, his greed and myopic view started to distort science. The same fire which lightened up cold caves was used to clear up vast tracts of jungles and destroy biodiversity. Ninety per cent of aboriginals and local species were wiped out within hundred years of Australia's discovery! Even today, the world looks on as the Brazilian Amazon is going up in flames!

"Now I am become death, the destroyer of the world"

J. Robert Oppenheimer uttered these famous lines taking a cue from Bhagavad Gita, on witnessing the destructive potential of his own creative genius – the atom bomb. His "atomic sciences" knowledge was misused and destroyed "Hiroshima" and "Nagasaki" flattering them to the ground. Even now, we witness the "nuclear umbrella" being used as a cover to wage "proxy wars" around the world especially with reference to Pakistan.

While on one hand, the medical sciences revolutionised healthcare such as global elimination of the dreaded "smallpox", its distortion is leading to anti-microbial resistance which is again threatening to push us back to pre-penicillin era! The advances in microbiology have created challenges such as designer babies and unregulated

genetically modified crops which are headaches to policy-makers concerned about long term effects, equity and safety issues. The case of Jiankui who edited human germline is a befitting example!

On the farms, the agriculture science ushered green revolution and fulfilled food security to an extent but excessive fertilizers pesticide use and groundwater extraction again jeopardises and raise a spectre of "Malthusian population demise"

Not just the earth, the space is also witnessing new space weaponisation trends as the USA fired the first shots by ordering a "space force". Excessive space assets have already caused issues of space debris threatening the vital communication and remote sensing infrastructure.

The age of machines which propelled humans to our "golden era" of prosperity via the industrial revolution already raise fears of a "Frankenstein monster "with the arrival of artificial intelligence, deep learning, big data and internet of things. The "terminators" may well come to haunt humankind!

Serious legal and moral issues have come up. Concerns of privacy are heightened with Cambridge Analytic episode while the issues of cybersecurity are a new rage with attacks of Petya and WannaCry Ransomware! The internet which connects humans like "nerves in the brain" also has the capacity to bombard every node with fake news and radicalisation! Rise of ISIS recruitments in recent history, the Bulandshahar violence were all facilitated by distortions of science of computers.

The Orwellian world is already coming to life with Chinese government using AI based mass surveillance to monitor Uyghurs. As Gandhiji warned of "Machines displacing Man", similarly the 4th industrial revolution threatens jobs as the OLO's future of work report points out.

However, the biggest existential threat which our "gift" of science has caused, is the ongoing climate change and global warming. The IPCC special report on "1.5° C warming" shows predictions of submerging coastlines, melting Hindukush, water insecurity and frequent extreme events like floods, and cyclones.

(Wo)Man's greed for more, ceaseless and endless desire for power, nationalistic jingoism have all contributed in the deadly cocktail that seems to go out of hand. As Charles Dickens eloquently put it "it was an age of wisdom and an age of foolishness" thus it's upon humans themselves to choose whether to exploit the beneficial effects of scientific knowledge or to misuse it towards our own impending doom!

In the age of globalised world, the challenges cannot be solved in silos. Science needs to be regulated towards useful purpose at a global level. Bodies like UN should formulate new rules to curb misuse. The Antarctic treaty can be a model as it promotes only research and sustainable use of resources.

But for the world to change, change has to start from within! Human's blessed with reason should grasp fully the consequences of their myopic view of science and its technological use. Learning to cooperate in peaceful uses of sciences can reap huge dividends as our past shows. We can make further advances in science to roll-back certain mistakes such as pollution of environment, weapons of mass destruction. Approaches such as ocean fertilization, sequestering carbon by geo-engineering can curb global warming. IAEA checks on nuclear plants and similarly surveillance on labs developing sensitive technologies like genetic therapy can significantly boost or safety and ensure inter-generational equity.

Finally, as Yuval Noah Harari also exclaims: humans with seemingly unlimited power facilitated by science have become "new age gods". But Gods who are unknown to the purpose of their scientific powers can wreak havoc. Let this 21st century be instead known by humanity's wisdom to channel their powers in pursuit of greater peace, harmony and happiness on our little planet!

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8

"To Be Beautiful, Life Doesn't Require To Be Big"

Jayant Nahata, IAS (AIR 56 CSE 2020)

As India celebrates the birth anniversary of its heroic freedom-fighter – the legendary Bhagat Singh in the coming month of September, his brief 24 years of life is a definite lesson that to be beautiful, life certainly doesn't require to be big. With his revolutionary struggles such as throwing bomb in the central assembly against repressive laws to his radical ideas of socialism, anti-casteism and anti-communalism, Bhagat Singh not only lived a great life but left a legacy to be cherished by Indians across the world till date.

On the other hand, Gandhiji although assassinated and dying unnaturally, was able to wage a protracted struggle based on truth and non-violence against British Colonialism. Certainly, long/big life of Gandhiji proved to be the greatest blessing for Indians. This raises the question whether even a small/short life can be beautiful? What is the meaning of beautiful or big life?

Beautiful life can entail wide connotations and multiple meanings. Furthermore, meanings and relative importance can vary from person to person, state or culture. For the tribes in Papua New Guinea, preserving their language and traditional ways of life may constitute a beautiful life. While for corporates in towering buildings of America, six figure salaries is all that's needed for a beautiful life!!

"Big" life, similarly, can mean a longer span of individual life or can imply fat pay-checks/income, luxury or to accomplish fame and respect. As the typical Ad line goes – "you have one life, make it BIG".

In the following essay, let's see whether and how life can be beautiful even in small settings limited circumstances! Whether long life may even be a "boon" adding to life struggle or if the opposite is true?

Further, we will see how a beautiful life can be led by all when (wo)man takes birth in this world, the "clock" of life-death cycle starts. As one socialises and comes to terms with societal hopes, country's problems and life's daily struggles, everyone, whether in high rises or slums strives to live a beautiful life in the future. Given the social-milieu, one tends to blur the distinction between "beautiful "and "big"– conflating the rich with

happy or the rural/poor as living somewhat "lesser life". Nothing can be further from truth.

The lives of great men and women like the stated case of Bhagat Singh, makes it clear, that big life isn't a pre-requisite to a beautiful one. As Ambedkar said and proved with his own story – "life shouldn't be long, it should be great".

One should strive for value based, ethical life, a life of passionate stirring and courage/ risk. The likes of Manjunath comprised their lives but not their ideals hence leaving behind a "beautiful "legacy for civil servants.

Contrarily, large/long life can even prove burdensome. Old age, quite literally, is painful for most and rich often live in constant fear of an impending robbery of their hard earned money.

The saying is not just applicable to individuals, but looked closely, seems to hold true across various facets of life.

The small community of Aristotle in Tamil Nadu exudes harmonious living while maintaining environment free of communalism often proves difficult due to tensions between two major communities/religions in India! Similarly the minority religion Jainism is also one of the most prosperous and educated community in India. This is possible due to the inherent dynamics of small groups which aid in cohesion, exchanges and building mutual trust.

Apart from small communities or religious, the tiny nation of Bhutan by holding the title of "the happiest nation" on earth, again shows how by isn't the criterion for beautiful!

Large groups often breed confusion, policy paralysis as had been the case of League of Nations needing consensus of all members for any collective security operations. Its failing was one of the major factors for World War-2 causing 20 million deaths and untold misery across the globe. Comparing it with the 5 membered (permanent members that is) UN Security Council, UNSC has definitely spearheaded a peaceful post-1945 world free of World War-3!

The current predicament of climate change facing mankind also has roots in the striving for "big" life. The Industrial Revolution of 18th century began with the promise of widespread prosperity but ended up threatening mankind's very existence as pointed out by numerous reports starting from Brundtland to IPCC.

Small life entails simplicity rather than complexity. Napoleon's ideal for laws was one that "comprehendable by a lay man and fits in the pocket".

The 40 odd central labour laws on top of 100s of state laws shackling India's employment and in turn the growth story, proves that policy-makers have yet to take a lesson from Napoleon preachings.

Outside the political-legal sphere, even in space, the norm has been to go small! ISRO with a small budget (₹ 10,000 crore) is a lean and mean body successfully dishing out series of successful proud-writing missions. Its Mangalyaan mission was in fact on a budget "smaller" than that for the Hollywood movie "Galaxy". Going small is actually a boon, as it forces innovation (suited to India's context), efficient operations and less wastage of public resources.

Even in the naxal infested red corridor, the success of Greyhounds (small elite commando battalions) of Andhra Pradesh shows small is an advantage even in strategic operations. The same was proven in Balakot and Uri surgical strike.

However, no generalisation should be made. It's imperative to point that even small can be bad and big can be beautiful! Small nations like Bhutan have often found themselves squeezed "like an egg between two boulders" of India and China as the recent Doklam crisis indicated. On the other hand, the "ASEAN Miracle" as foreign affairs experts term it shows how solidarity among small nations into a larger grouping can breed prosperity in economic and strategic security.

On an individual's life, the benefits of joint family such as love of siblings/cousins, values from elders etc. indicates that "big" life can be beautiful. Moreover, there are trends of personalities/famous stars to go for "cryo-preservation" in the hopes of being received when someday technology matures in the future. Thus, the craving for big life is nevertheless lodged deep inside humans!

So what is an ideal life which is beautiful? Big or small? Although mired in controversy, one should not value life in terms of length or wealth (bigness) alone, there's need for broad basing the concept of a beautiful life. This will definitely solve many of our society's challenges such as rising suicides and depression (even among rich) for those who struggle to make it big! The case of Bill Gates who despite making large empire (typical definition of beautiful life lived), is donating on "small" yet important causes such as $100 million for AIDS prevention in Africa or sanitation improvement in India. It shows satisfaction and happiness is earned in "meaningful life" rather than long one.

Our education should incorporate this lesson. The "Happiness Curriculum" in Delhi is already gaining positive feedback from parents who see their children more happier in their lives and desisting from the urge to go on 'social media' to portraying a "big/happy" life.

The State should similarly opt for sustainability in economic growth. This gains significance as the Industrial Revolution 4.0 has started to revolutionise economy but can entail a huge price on environment if not regulated properly.

Victor Franklin chronicling his experience, as prisoner in Nazi Concentration camps, in his book – "Man's search for Meaning" articulates that even in the greatest suffering, the (wo)man derives meaning in small hopes and wishes such as reuniting with his/her family or getting to savour a full meal. Beautiful thus doesn't require a big life to be lived!

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9

"In Today's World A Culture of Death is Gaining Supremacy Over a Culture of Life"

Abhishek Bharti, IPS (CSE 2017)

It was not very long ago that a body of 7 years old boy was washed ashore in Greece, which shook the conscience of the world, during Syrian crisis. But a tradition of inaction has resulted into a very similar problem on India's border with Myanmar, in the form of Rohingyas. Termed as the most persecuted minorities of the world, they beg for life to the world. These two instances are demonstrations of a "culture of death" that has taken over the world. It has resulted into sheer neglect towards value of a human life whereas a "Culture of life" is fast vaporizing.

Culture of life is engrained in the basic idea of humanity, where life of not only humans but even environmental life is valued and cherished. There are various factors contributing towards this culture of death such as mindless competition, envy, profit making attitude at any cost, inequalities in society and corruption. Various domains could be observed to demonstrate this.

International relations of the world are at a point that is explicitly following a culture of death. Wars for selfish gains in Afghanistan, Syria, Yemen, etc. have led to vast human rights violations like beheadings, sexual slaves etc. Refugee crisis arising out of it is the best illustration of new culture of death that has become a norm. Further, various autocratic nations of the world such as Saudi Arabia have extreme laws which have no regard for life. Borders between nations like India-Pakistan are testimony to barbarism where solder's heads are beheaded and played with. This culture of death is well documented in public domain.

Above mentioned issues have their genesis in politics and politicians, be it at national or international level. For example, despite call from human rights bodies and international organisations, death penalty is still practiced in India. It enforces a culture of death in ethics of the society. Further, politicians often resort to hate-speeches which lead to communal violence, tearing away last shred of culture of life. Regional politics, knowingly, gives fuel to the fire of xenophobia where people are targeted on the basis of race. Mass exodus of students of North-east from Bangalore is one such example. Persecution of labourers from Bihar in Maharashtra is another blot on culture of life.

Concept of life is an integral part of environment which is also not untouched by culture of death. Mindless pollution by developed and developing states is leading to inhabitable environment for all forms of life. An illustration of this is brutal destruction of Amazon rainforests for developmental activities. It has led to mass extinction of various species from the world. Construction of big dams not only effect local ecology but also displaces vast human population. Such is the onslaught of culture of death on environment that High Court of Uttarakhand in India had to give a living-status to two rivers i.e. Ganga and Yamuna, so that they could be saved. Voices of environmentalists and activists such as Medha Patkar fall on deaf years. They are minorities working towards culture of life. Paris climate deal was the game-changer towards final attempt at protection of life and humanity; even it is now stuck because of USA pulling out of it. Small island states will bear the brunt of such ignorance in the long run.

As stated earlier, this culture of death gets life from selfish nature of mankind, which is always focussed on economic domain. Neo-colonisation has appeared as a new form of exploitation which is used by developed countries to subjugate developing countries with money power. It has led to utter disregard to egalitarian culture of life and has led to widespread inequalities and lopsided development. Developed countries exploit resources of poor nations without any investment on health, education or human resource. It leads to a vicious circle of poverty-hunger-death, thus abiding by culture of death. High incidences of mortality rates are a testimony to this face. Growth of unorganised sector is another domain which is against values of human life. With no social security protection by the state, workers lead a life of agony, with even children employed in hazardous work. It leads to death of childhood in children and death of adulthood in young workers.

If observed closely, internal security challenges that India faces today are going towards path of culture of death. Uneven development, human rights violation and failure of state policies have pushed poor tribal population towards death by snatching away their lands. These areas have become breeding ground for Marxism and Maoism. These extreme groups believe in negotiations through death tolls. State, which is a mature partner in the dispute, seems to be neglecting nature of life and is engaged in continuous military operations against its own citizens. Further border areas of India have become a transit point for "trade of death" where drugs, women and children are bought, sold and smuggled illegally. Human piracy and sex rackets running in various parts of our country are worse than death itself.

Our national fabric, which was once based on humanism and reason, compassion for weaker sections and melting pot culture, is degrading fast. Communal riots are used to gain political mileages which are messengers of death. Further, social institutions such as family, religion, community etc. are moving away from tolerance and culture of life day by day. Vulnerable population such as disabled and elderly are left to fend for themselves. Younger working section is mindlessly chasing after money. Even family members are

killed for money and property. Honour killings are another feature where even pure feeling of love is sacrificed at attack of death.

Thus, with focus on above mentioned onslaught of "culture of death" which is taking over "culture of life", new lease of life needs to be given to culture of life. International principles must be charted out which keep human rights and lives at top level. Proper enforcement and adherence of them will promote life. Mature political class must replace environment of hate, intolerance with inclusion and equality. State policies must try to promote the lowest and weakest sections of society which could be done by providing equal life chances. Environmental protection must be a top priority for all the nations because if our planet degrades further there will be no one to save humanity. Focus should be conservation of all flora and fauna. It requires intimate international collaboration.

Gandhian ethics are the best antidote for defeating this prevalent "culture of death" in today's world. The philosophy of "live and let live" along with "compassion for life" will give a new lease of life to the "culture of life".

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10

"Raise Your Voice, Not The Sea Level"

Abhishek Bharti, IPS (CSE 2017)

Last summer, India witnessed drought for second year in a row. Condition was such that in parts of north Telangana, Southern Odisha, eastern Maharashtra and parts of Uttar Pradesh – even drinking water was scarce, let alone water for agricultural purposes. Subsequent outcomes like farmer suicides have become a national concern today. Another case which is of relevance to this discussion is of recently concluded Rio Olympics in Brazil. An athlete after winning medal, standing on the podium, made an appeal to the world – to check global warming. He belonged to an island nation in central Pacific Ocean which is getting submerged due to rising sea level.

Although above 2 cases seem disconnected at first look – one of draught, other flood like situation because of ocean, but are very much connected because harsh weather conditions (like droughts, fires, floods) have become frequent because of climate change and resultant global warming.

Although a common perception among layman is that it's all result of sinister human actions, that too in recent past, is not completely true. Our planet is subjected to glacial cycles which take place on a time scale of millions of years. Ice age and warm age are consequent phenomenon. The epoch of geological time scale, where humanity is existing today i.e. Pleistocene era, is in warm cycle of earth. Although these cycles are very much natural and are triggered by natural causes but with the advent of humanity and recent advances in science and technology for the past 200 years, human have accelerated this cycle. Result is global warming and subsequently rising sea level because of melting of glaciers.

Various natural phenomenon and man-made reasons have led to a global climate change i.e. rise in average temperature of the earth measured on large time scale. Outcome of this is global warming.

Various facets of human activity in this regard could be discussed. The origin and tip-off point towards humanity's contribution was onset of industrial revolution in western nations (Europe) during mid-nineteenth century when large scale depletion of natural

resources was undertaken. Steel plants, cement industries, automobiles etc. – all operating on fossil fuel based energy were pumping greenhouse gases in atmosphere. Greenhouse gases trap energy from sun, rising temperature of earth leading to global warming. It led to such damages that its effects are left even today. Even developing nations today depend on primarily fossil fuels for energy needs.

Sun's rays contain ultra-violet rays which are harmful to us and carry warming potential. These are filtered by ozone layer around earth. But because of use of Chlorofluorocarbons (CFC) which react with ozone and destroy it, a hole in ozone has occurred over Antarctica. These are discharged through their use in air conditioners, fire extinguishers etc.

One of the most potent greenhouse gas is carbon dioxide which is emitted heavily into the atmosphere by way of vehicular discharge, industries etc. Developed nations of today blame developing nations for increased emissions and vice versa. This blame-game never reaches to any constructive conclusion and humanity moves to dangers of warming.

Agriculture is one occupation which is practiced by majority in developing world. But because of lack of scientific practices and awareness, huge amounts of methane are released into the atmosphere which is also a very potent greenhouse gas. Mining activities and inundation of large parts due to dam construction are also contributing to methane release.

But human activity is not acting in isolation. Even certain natural phenomenon contributes to global warming.

Volcanoes emit plumes of hot gases from the earth's interior. They are a mix of various harmful gases which trap solar energy and raise temperature of earth. Water vapour constitutes 98% of greenhouse gases. It's presence in the atmosphere is mostly because of natural processes like transpiration, evaporation etc. Forest fires are also naturally caused (even some are human induced). They destroy hectares of forest releasing CO_2 in atmosphere.

Harmful effects of global warming and rising sea levels are around us – whether national or international level.

Various natural phenomenons that are related directly or indirectly to climate change and global warming are cyclones, foods, droughts, fires, increasing desertification etc. Worst affected because of these are island nations in between sea as well as coastal regions of all continents. Even a metre rise of sea level could wipe out many areas from world map along with wiping considerable amount of human population. Developing nations are worst hit who do not have resource to relocate and rehabilitate their vulnerable population. Recent cases of drought in central India and the resulting crisis was evidence of this. Japan is another country which faces the wrath of nature's fury where incidences of cyclones and earthquakes along with Tsunami have increased. They are related with disturbance in balance of nature. Similarly USA, Africa, Europe are also facing abnormal

weather conditions in face of climate charge.

Solutions to this problem are not quick-fix but require long term vision. It requires immediate reduction in emission of greenhouse gases, no encroachment of coastal areas, adoption of non-conventional sources of energy (like solar, wind, ocean-wave etc.) which are renewable in nature and proper environmental impact assessment before taking up any development projects.

World has taken view of this grave problem and it has resulted in some commendable international collaboration right from Kyoto-protocol in 1997 to Paris climate conference in 2015. They are to reduce the emission of greenhouse gases in atmosphere. Other actions such as Montreal Protocol against ozone depleting substances have shown great promise. India has its own National action plan on climate change (NAPCC) to reduce harmful effects on environment.

Voices against global warming have been heard now and then in corridors of power but in recent past few decades they have gained momentum. Various environmental movements like Chipko movement have voices of villagers. Various NGOs like Green Peace India have been fighting tooth and nail for the rights of people affected by global climate change. Various celebrities like Leonardo DiCaprio have voiced their concerns and joined as ambassadors against climate change. Voices from civil society and media are always keeping decision makers on alert. These voices have led to better concerted action towards global warming.

Thus, no amount of facts and figures can deny that humanity itself is at risk today because of global warming. More voices need to join the crusade towards this cause so that these global concerns echo in every corner and street of world – whether rich or poor.

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Health is a Fundamental Right in India – Prospect and Challenges

Abhishek Jain, IAS (AIR 24 CSE 2019)

"Aarogyam Paramam Bhagyam Swasthyam Sarwaarth Saadhanam" (Health is the ultimate blessing it can help us achieve anything).

– Vedas

Muzaffarpur in Bihar was in news again. More than 150 children died there due to Acute Encephalitis Syndrome (AES). The malnourished children were already vulnerable to diseases. However, poorly managed and incapable public healthcare turned the disease into a tragic epidemic!!!

The incident here lays bare the horrific truth of how State pays the least value to human health in India. Therefore, there is an immediate need to make the State responsible by including right to health as a fundamental right in India.

In this essay, we will discuss what we mean by right to health. Then we will see as to why it needs to be made a fundamental right. Then we will look at the myriad of challenges in the way. Finally we will analyze the prospects of this idea and the path to achieve it. Let us begin.

Right to Health – A Holistic Right

When we talk about health, it does not just connote absence of diseases. Health as a right encompasses physical, mental, social and emotional well-being of an individual. This can also be seen in ancient Indian texts of Charaka Samhita and Sushruta Samhita where health denotes overall wellness of an individual.

This right has indeed been envisaged by our Constitution under Directive Principles of State Policy. Article 47 says that the state shall strive to raise the level of nutrition and public health.

However, is making health merely a non-enforceable right enough? A big No. The problem here is that it does not make the state accountable for its failure to deliver health services, thus making it lack in attitude.

But, what difference will it make if health is made a fundamental right? The answer is – it will make all the difference!

A fundamental right will make it a constitutional obligation on the part of the state to guarantee health services to all the citizens. In case of denial, the citizens can seek judicial remedy. Thus, by making the state more accountable, it will force it to deliver results on ground.

Further, health has been recognized as a basic human right in the "Universal Declaration of Human Rights". Making it a part of fundamental rights will reinforce India's commitment to ensure universal healthcare.

However, it's easier said than done. There are bound to be a variety of challenges that we will face. Let us discuss some of them.

A Difficult Feat to Achieve

Firstly, it will require a constitutional amendment with a 2/3rd majority in both the Houses of the Parliament. But, this is also a relatively easier task. The real challenge will lie in actually delivering this right on the ground to all.

Our existing public health infrastructure is in shambles. We have only 1.3 hospital beds per 1,000 population! Out of these, 73% are in urban areas whereas 69% population resides in the villages.

Further, India spends only 1.15-1.5% of its GDP on healthcare which is shockingly low. With less than 1 doctor per 1,000 people, most of our rural and tribal population doesn't even have access to basic healthcare.

Going further, we have 38.4% stunting and 20% wasting. Poor sanitation and open defecation leads to faster spread of diseases in our slums and rural areas. Poor access to vaccination, exploitation by private sector and costly medicines further add to the enormous challenge.

Going even further, deep rooted patriarchy, casteism and communalism snatch away the dignity of an individual. This poorly affects the "social health".

Lastly, changing lifestyle, lack of physical exercise and rising stress levels take away the "emotional health" of an individual.

Clearly, we lack the capability at the moment to deliver this fundamental right. So, shall we not try at all? Are there ways to make it possible? Let us discuss.

The Prospects: We Need to Make it Happen

Yes, it's possible. The prospects of delivering health as a fundamental right will become brighter if certain steps are taken.

Firstly, the level of health expenditure needs to be raised to 2.5% of GDP as envisaged in the National Health Policy 2017. A bulk of it shall be spent on developing primary health

infrastructure. We can follow the model of Mohalla Clinics by Delhi which provides free doctor, vaccination and medicine services to all.

Secondly, an All-India Health Services should be created on lines of IAS and IPS. This will ensure specialized and efficient health administration.

Thirdly, capacity building and technological upgradation of ASHA and Anganwadi workers shall be undertaken. This will lead to better delivery of mother and child care, immunization as well as nutrition.

Fourthly, behavioural change to improve social health of the marginalized sections is also a critical requirement. Campaigns like Beti Bachao Beti Padhao and promotion of inter-caste marriages and inter-religion marriages can help here.

Fifthly, promotion of AYUSH services and meditation to improve emotional health can also be taken up.

Lastly, a mechanism to enforce this right must be developed through a detailed policy. The actions that the courts can take in case of failure on part of the state should be listed out. This may involve compensation to the victim and strict actions against errant officials.

Winston Churchill said that "healthy citizens are the greatest assets any country can have". Thus, India needs to make strides towards enshrining health as a fundamental right. Despite many challenges, it is indeed possible and with the right steps, its prospects seem very high.

As Mohammad Ali said – "Some people want it to happen. Some wish it to happen. Others make it happen." We will definitely make it happen and only then we will achieve our goal of New India where Muzzaffarpur like incidents do not happen and the dream of "Sarve Bhavantu Sukhinah, Santu Niramaya" is actually materialized.

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Abhishek Jain, IAS (AIR 24 CSE 2019)

Rahul is doing his graduation in mechanical engineering from a reputed college. His syllabus consists of things and technologies of the past like basic motor, conductor, etc.!!! His sole focus during his college days was to mug up the notes and pass the exams. Consequently, after graduation, he couldn't find any job because he lacked the necessarily skills to manage modern machines.

The problem is that there are millions of Rahuls in India who are unemployed because they are not "employable". This is because our higher education system as of now is not future ready.

In this essay, we will discuss what the future is going to be like i.e. what does it demands from our higher education system. Then we will analyze how, at present, our system is incapable of delivering the demands of the future. Finally, we will look at certain solutions to make ourselves future ready. Let us begin.

What Are the Future Demands?

We are on the verge of Industrial Revolution 4.0. It will be an era guided by newer technologies like Artificial Intelligence, Internet of Things and Data Analytics. Old skills will get redundant and the "degrees" of today will become a thing of the bygone era.

Similarly, rising complexities in industrial operations will demand specific functional skills, for example: there will not be "marketing managers" in future. But there will be" digital marketers", content creators, telemarketers, etc. Vocational education, thus, will become extremely important.

In the field of healthcare, digital technologies like telemedicine, robotic surgery and AI based diagnostics are the future. Thus, medical education of today needs to apprise students of it.

Tomorrow's agriculture will be guided by genetic engineering; AI based precision technologies, water smart technologies. Agriculture graduates need to be conversant with these future technologies.

Further, success in future will be guided by one's capacity to innovate and be creative. It, therefore, demands us to inculcate an innovative bent of mind among our students. They must be able to think out of the box and take risks if they have to succeed in the future.

Furthermore, future also poses grievous challenges to us like climate change, rising social tensions, wavering ethical compass and lust for power and money. The onus is on our universities to turn the students of today into better citizens of the future, citizens who are ethical and sensitive to the environment.

But are our colleges and universities ready for these future challenges? The answer is NO. Let us discuss.

We Are not Future Ready as Yet

Our colleges continue to teach outdated syllabus and are not apprised with the current or future realities. According to a recent survey, only 1.13% engineers in India have ability to handle future skills.

Further, there is a complete lack of R&D in our higher education. The funding is meagre and the infrastructure is in shambles. We file one of the lowest number of patents in the world. When the educator focuses only on rote learning and securing more marks, how can we expect any future oriented innovation coming out of this system?

The quality of teaching especially in state government universities is also a cause of worry. There is focus on theory but not on practical aspects.

Similarly, the level of internships and industrial trainings taken up by students to get hands on experience on jobs is very low.

Further, our universities do not focus on holistic development of a person. There is virtually no ethical training and no development of environmental sensitivity. This is dangerous, as Theodore Roosevelt has said – "To educate a person in the mind but not in morals is to educate a menace to society."

Therefore, if we want our higher education system to deliver the workforce of the future, certain important steps need to be taken. Let us discuss.

Miles To Go Before We Sleep

Firstly, there is an urgent need to grant full autonomy to our universities. This will enable them to update the syllabus regularly and offer multidimensional courses, e.g. KREA University has started offering choice of subjects to students to make "tailor-made degrees" like B.Tech in food science with marketing. Institute of Eminence (IoE) scheme which grants freedom is a good step and thus, must be expanded.

Secondly, higher funding in R&D must be made, especially by government. More industry-academia linkages and incubation centres must be set up to boost creative drive among students. This will help them develop capability to face future challenges.

Thirdly, centres of excellence in future technologies like block chain and AI must be set up. This will give practical training to students and give them a glimpse of what future holds for them.

Fourthly, teacher training should be undertaken so that our teachers are also future ready. They must "teach students how to think and not what to think".

Fifthly, our colleges must focus on holistic development of our students. To be able to face the future, we must learn from the past. Similarly, we can learn from the holistic way of teaching that was followed at ancient India's gurukuls. Thus, the students today must be made morally sensitive and made aware of their responsibilities to vote as a citizen, to conserve water, to respect women and to be inclusive.

Amartya Sen in his capability approach has said that true development comes by improving people's capacities. If India has to sustain its developmental path in future, we will have to usher in an "educational devolution". We have to bridge the gap between the existing capacities of our colleges and the demand of the future. Only then, our youngsters like Rahul will be able to succeed in future, because

"Yesterday is not ours to recover but tomorrow is ours to win or lose".

❑❑

It was in 2013, shockwaves were sent across the world when Edward Snowden, an ex-CIA systems analyst revealed the grim realities of the surveillance programme of the US National Security Agency (NSA). The documents disclosed how NSA had tapped directly into the servers of Google and Facebook to keep a watch over the communications of millions of users worldwide!! Further, with a top secret court order, it had collected the telephone records of millions of users of Verizon!!!

These startling revelations busted the myths about privacy in this digital era and made the world face the astonishing realities. This calls for a close examination of the issue.

In this essay, we will discuss the meaning of privacy. Then we will try to bust the 3 most common myths associated with online privacy. Finally, we will look at the way forward as it should be.

Privacy means a state of not being observed and disturbed by others. It is the freedom from security and surveillance by others without consent. It refers to the right to determine whether, when, how and to whom one's personal information will be disclosed. With the emergence of the digital era, a lot of myths about privacy have emerged. Let us discuss them one by one.

Myth 1- Privacy is Not Important

A lot of people argue that when they do NOT have anything to hide, then why do they need privacy? It's of no use. However, this is a fallacy. As Edward Snowden said "saying that you don't care about privacy because you don't have anything to hide is in no way different that saying that you don't care about freedom of speech because you have nothing to say."

The reality is that privacy is a basic human right which is a part of Article 21- Right to life as laid down by the Supreme Court of India in the Puttaswamy Judgment. It allows an individual to maintain her autonomy, dignity and personal integrity.

Further, it is essential to keep alive freedom of speech and expression in a democracy. Imagine the government surveilling anyone who it thinks is opposing it and exploiting

that personal information to ruin his reputation!! This will amount to muzzling of dissent and subversion of democracy.

In addition, privacy is essential to prevent cybercrimes like identity frauds and bank frauds e.g. terrorists misusing Aadhar data online to get fake SIM cards issued, cyber stalking and harassment and blackmailing of girls and women by accessing sensitive images on their mobile, etc.

Therefore, to water down privacy is a myth while to uphold it is a reality. Now, let us go on to the second myth associated with it.

Myth 2- Privacy is Not Really Threatened

Many argue that privacy is NOT really in danger as ample safeguards exist to protect it. Further, there is no use of anyone's personal information. However, this is again a myth. The reality is that our privacy is under a constant threat 24x7.

Several malwares like viruses and Trojans act as spyware. They track our data, replicate it and send it to the hackers for misuse.

Further, big data analytics and data mining have ensured that we are being tracked continuously online. Companies like Google, Facebook, Amazon, etc. "know" what we like, dislike, our political learning and even our sexual orientations! They easily use it to influence our behaviour through targeted ads. e.g. Cambridge Analytica used Facebook data of profile users and psychologically manipulated them through fake news and campaigns into voting for a particular candidate. It is alleged to have subverted Brexit vote and Bihar elections.

In addition, schemes like Aadhar in India have been alleged to be creating the scope of a "surveillance state" as well as involving privacy risks. According to Centre for Internet and Society, the Aadhar details with sensitive biometrics of 130 billion aadhar holders are available online.

Going further, our privacy is under threat from enemy states and terrorists who are now perpetrating cyber warfare and hacking our personal information e.g. Russian hackers influencing US Presidential elections. Thus, it is a myth to say that our privacy is secure. The reality is that it is NOT. Now, let us discuss the next myth.

Myth 3 – Privacy Cannot Be Secured In This Digital Era

Some people believe that due to the sheer expanse of internet, it is next to impossible to protect privacy. Further, they believe that to maintain national security, for criminal investigation and schemes like DBT privacy has to be violated. However, again, this is a myth. The reality is that privacy can be protected and secured.

Firstly, a personal data protection law on lines of General Data Protection Regulation (GDPR) in UK needs to be brought about. Such laws must provide for a rights based approach with complete user control over their information. In India, B. N. Srikrishna

committee has suggested to establish an autonomous Data Protection Authority of India (DPI) to enforce such a law.

Secondly, the state and the companies must be made responsible for securing the information of citizens. Heavy penalties must be charged in case of breach of security or misuse of data.

Thirdly, use of technology like blockchain which involves decentralized, transparent and auditable database should be leveraged in schemes like Aadhar to protect privacy.

Fourthly, robust institutional framework like a cyber command of military to protect the country from external threats.

Finally, public education on ways to secure privacy is critical and should be made part of Digital India campaign. Simple steps like using an antivirus, not using public Wi-Fi, password protection, etc. can go a long way in securing our privacy. Thus, it is a myth that privacy can't be protected while the reality is that it can be.

To conclude, countries like India must lead the world and provide a model framework for protection of the privacy of its citizens. This should be the vision of "New India" we all envisage and will lead to SABKA SAATH SABKA VIKAS. We shall leave behind the myths about privacy in the past and join hands together to make privacy protection a reality because

"Yesterday is NOT ours to recover, but tomorrow is ours to win or loose."

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14 The End of Law is Not to Abolish or Restrain but to Preserve and Enlarge Freedom

Abhishek Jain, IAS (AIR 24 CSE 2019)

There is a lot of debate going around the proposed triple talaq law. Critics claim that it is abolitionary in nature and restricts freedom of minorities. However, they fail to understand that abolition of triple talaq is just a means. The real end is to preserve and enlarge the freedom of Muslim women. It is to liberate them from the clutches of a highly restrictive and patriarchal setup which condemns them to a status of second class citizen. Hence, the ultimate aim of the law is not to restrain, but to liberate.

When great philosophers like Rousseau and Hobbes studied how the concept of law itself was created by man, they were surprised that in the pre-historic times, when there were no laws, man was not at all free. Why so? Because he was in constant fear of being attacked by another man and thus was in hiding!!!

Thus, man who was selfish yet rational entered into a social contract with others. This way a system of law and state was created. They did restrict some activities like violence. But, they succeeded in creating a society where man was free: free from fear, free from to pursue his objectives and to grow and develop.

The same principle holds true in the contemporary times also. Let us examine it in detail.

The constitutional law in India guarantees tremendous freedom to the people. Fundamental rights in Part III of our constitution restrain the authority of the state. By doing so, they enlarge the freedom of citizens. From freedom of speech in Article 19 to freedom of religion in Article 25, this fundamental law of our land is a masterpiece of liberty.

Similarly, if we look at economic laws like Goods and Services Tax, it does impose certain restrictions on businesses. But its ultimate aim is to promote economic freedom through free and easy trade and country wide market access.

Further, there are several laws meant for good governance like IESA Act, RTI Act 2005 or Social Audit Law in Manipur. Such laws also have tremendously enlarged the scope of freedom by providing the "freedom to access information" as well as freedom to govern them.

Going further ahead, there are also various social laws which are passed by the state. In India, the laws that abolish sati, dowry, child marriage and untouchability. Such

abolition has given social freedom to people at the bottom of the pyramid. Women and backward classes therefore, have gained freedom from discrimination and condemnation while having access to free and fair opportunity.

Looking at it from a global perspective, laws like General Data Protection Regulation (GDPR) in Europe significantly restrains information collection and sharing by online companies and websites. The end result is protection of citizen's privacy. This prevents creation of surveillance state where the state is like a "big brother who is always watching you". Thus, it boosts freedom of citizen and broadens liberty as highlighted by Supreme Court in Puttaswamy Judgment.

Till now, we have talked only about the man-made laws. But there is a greater law which is universal and much higher than any human law. It is the Natural Law or Moral Law. It says that every human being has right to freedom, fairness, equality and justice. Thus, freedom is inherent in the divine law also.

This reminds us of the time when Gandhiji was arrested by British during his Champaran campaign in 1917. He denied applying for bail in the court. He argued that though man-made law restricted his visit in Champaran but the higher moral law i.e. the law of his conscience made it his duty to help the poor. Thus, it sanctioned him with all the freedom to be compassionate towards others...Freedom in law is thus, like water in a river.

Therefore, we must understand that laws do put restrictions on us. But these are meant to provide us as much liberty as possible while restricting our right to infringe on anyone else's liberty. This is because "the liberty to swing my fist ends where your nose begins".

But, is it always the case? Can laws be misused or be meant to abolish or restrain? Yes. Let us discuss.

In several dictatorships or monarchies like North Korea law is used as a tool to instil fear and kill dissent among people. In India too, the end goal of certain laws like Sec 124 IPC, Sec 66 of IT Act (now repealed), porn ban, liquor ban etc. are just to abolish or restrain citizen's freedom.

But again, these are only a few exceptions to the wider system of law and state. The end goal of law was is to enlarge the freedom of all. Laws will have to use restrictions only as a means to a good end.

For us to become a more liberal society, we will have to ensure that the rule of law is firmly established, arbitrary powers are abolished and our institutions work independently and strongly. For this we as citizens will have to play an active role as the watchdog of law making process and for torch-bearers of dissent. Then, we will be able to realize, Gurudev Rabindranath Tagore's ideal society

"Where the mind is without fear and the head is held high."

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Meet Archana. She lives in a tribal village in Jharkhand. Her husband Arjun is a farmer. She started a self-help group comprising of 4 other village women to produce and sell their handicraft products. Her daughter, whom she had sent to Delhi to do B.Tech in computer science, has helped her set up an online website to market and sell. The women took a loan under MUDRA Yojana and began operations. Honestly, this was an exception for the orthodox villagers and Archana was frowned upon initially. But with her determination and support of Arjun, she kept working hard. Today her brand is a success and generates a very decent income for all the members. Looking at the rise in the standard of living of the families of Archana and others, the village women have began joining their SHG and are now supported by their families. What was an exception a few months ago, has become the norm today for the village. Thus, it will take a deep change in the mindset right from the grassroots level, handheld government support and success stories like that of Archana to lead the way towards empowerment of women and make gender equality a norm rather than an exception.

In this essay, we will examine the meaning of "gender quality" and its importance. Then we will look at the various challenges to it. Finally, we will discuss some solutions to it.

Gender Equality – Meaning and Importance

Gender equality refers to the equitable treatment of all genders- male, female and transgender in all aspects – economically, socially, politically, legally and ethically. It denotes an absence of discrimination on the basis of sex as propounded in Article 15 of our Constitution.

Gender equality is the cornerstone of basic human rights and our constitutional values. Harbouring it will provide tremendous boost to the overall development of our nation.

However, gender equality in India is a myth as reflected by 108th position out of 144 countries in the 2017 "Global Gender Gap Index". There are several challenges to gender equality in our nation.

Gender Equality – An Exception in India

Economically, women constitute only 21.9% of the total workforce and most of them are engaged in unorganized sector. The figures are woefully low. Even at workplace, they face discrimination in payment, authority given and in promotions. As per "Monster Salary Index" by monster.com, women in India are paid an average 20% less than men.

Socially, women literacy in India is meagre 65% which is far below the global average of 79%. Poor nutritional support, early marriages and pregnancy takes a severe toll on women's health. High maternal mortality rate and acute anaemic are very common in India. Further, female feticide, dowry, several harassment at workplace, cyber stalking and bullying, rape, trafficking and forced prostitution make the claim of gender equality laughable in our nation.

Politico-Administratively, the representation of women and transgender in politics, civil services and judiciary is grievously low. A meagre 11.2% of Lok Sabha MP and 9% of total MLA are women. In the last 67 years of Supreme Court (up to 2017), only 6 women judges and no transgender judge has been appointed. The gender insensitivity of our institutions is thus evident.

Morally, women are not allowed to make life choices like choosing life partners (Hadiya Case), they are denied right to bodily integrity (marital rape), reproductive choices and lack of say in family decision making. Transgenders, on the other hand are considered untouchables and are forcefully excluded from the society.

Environmentally, the impact of climate change is disproportionately high on women. As per UN, 80% of those displaced by climate change induced disasters are women and children. Heat waves, drought and floods grievously affect pregnant women. As lakes dry up, rural women need to walk longer distances to fetch water.

Thus, rather than being norm, equality of gender is an exception in India. But it poses a severe danger to sustainable development and thus, immediate steps need to be taken to rectify the situation.

What Will It Take to Make Gender Equality the Norm?

Firstly, rapid expansion of education among women especially SC/ST and minority girls is required. More girls' school, colleges and hostels needs to be opened in backward districts. Further, it is vital to incentivize girl education. Schemes like "Mukhyamantri Laadli Yojana" in Jharkhand which provides financial grants to girls as they progress in school years can be emulated by other states. As it is said – "educating a boy is educating a person, educating a girl is educating the nation." Also, reservation for transgenders in schools and colleges should be enforced.

Secondly, mother and child healthcare should be made accessible by infrastructure upgradation of primary health centres. There is also need to provide nutritional support to girls, reproductive health awareness, access to quality sanitary pads and contraceptives in rural areas to improve the state of women health and family planning.

Thirdly, making women financially independent can be a great harbinger of gender equality. Skill development through vocational training to girls and transgender, preventing sexual harassment at workplace, providing technological, marketing and financial support to women and transgender entrepreneurs can dramatically improve their participation in workforce and reduce their dependency on family.

Fourthly, crackdown on female feticide and ostracisation of transgenders, self defence training, use of technology like GPS and alarm watch (e.g. Sonata Act Watch – sends alarm in case of emergency) and speedy trial in a sensitive environment has the potential to drastically curb gender specific crimes and make them an "exception" rather than the norm.

Fifthly, it is imperative to pass women reservation bill to reserve 1/3rd seats in Lok Sabha and state legislatures for women. Free coaching to girls and transgenders for civil services and judicial exams can be provided to improve their representation.

Sixthly, climate change adaptation and mitigation strategies with special focus on gender specific responses must be implemented. It is high time to provide more representation to women in climate change negotiation bodies, promote women led renewable energy start-ups and train women farmers in climate resilient agriculture.

Lastly, behavioural changes among the people can serve as the catalyst of gender equality. Campaigns like Beti Bachao Beti Padhao help fight gender stigmas. Community and religious leaders can also be involved to generate awareness about the importance of empowering all genders. Gender sensitive education can also be imparted in schools.

Though, we may be far away from making gender equality a norm in our country, yet, we are definitely making progress. I believe that our beautiful country with its great people will together lead the path to gender empowerment to achieve "SABKA SATH SABKA VIKAS" and realize the dream of "NEW INDIA". In the end, I am going to leave you with the excerpt of this beautiful poem by "Maya Angelou" which describes how women are fighting gender stereotypes and are overcoming them...I believe that gender equality will very soon be a norm in India as "women rise".

"You may write me down in history
With your bitter, twisted lies,
You may trod me in the very dirt
But still, like dust, I'll rise.

Does my sassiness upset you?
Why are you beset with gloom?
'Cause I walk like I've got oil wells
Pumping in my living room.

Just like moons and like suns,
With the certainty of tides,
Just like hopes springing high,
Still I'll rise..."

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16 Artificial Intelligence Has the Power to Make Human Intelligence Obsolete

Abhishek Saraf, IAS (AIR 8 CSE 2019)

Recently, Facebook witnessed what supra-human artificial intelligence (AI) would look like. Two of its AI algorithms developed a chat language of their own and started communicating – None of the researchers could figure it out. Struck by panic the team has no option but to turn the system off. But what if there was no off switch??

In another incident, Google's AI learnt over centuries worth of chess knowledge in a matter of four hours and started devising its own moves. Would Mr. V. Anand care to challenge such algo-Masters?

If we are to believe the warning of Tesla and Space X owner Mr. Elon Musk – We are actually summoning the demon with AI. These incidents show that AI clearly has the power to make human intelligence obsolete.

Much like anything else there are going to be benefits and loses of that. Humanity has to prepare so that challenges do not overwhelm it and benefits are shared collectively.

Man's desire for comfort led to development of machines to reduce physical labour. Now machines have been developed/developing fast that can even reduce intellectual labour. Artificial intelligence refers to such machines which exhibit intelligence of the characteristics of human – only artificially.

With such possibilities it is pertinent to wonder to what extent and in what sectors is human intelligence threatened by AI. As thing stand today – virtually every sector.

AI could replace human intelligence in farming as seen in AI-enabled precision agriculture farms of USA and Japan. AI-enabled identification of weeds and pests along with application of pesticides replaced human intelligence even at early stages of infection.

Manufacturing is seeing automation and rise of robots. These have precision and speed unmatched by humans. Construction sector is seeing AI assist engineers and architects both in design of as well as construction of buildings.

Not only blue collar jobs but white collar jobs are equally threatened. Alibaba CEO Jack Ma has predicted AI will be on the cover of time magazine by 2020 and work as CEO. Gartner's report predicts Indian IT Sector could lose 6.4 lakhs jobs by 2022 due to AI.

AI is fast intruding into share markets in the form of high frequency trading – must faster than what human brokers are capable of. Similarly, healthcare has seen AI-enabled diagnostics produce better cancer detection than oncologists. Remote surgeries assisted by AI are a reality.

Education could see AI teachers continuously assessing the understanding, learning pace of students and gearing pace of course as per the need, thus realising the idea of continuous comprehensive evaluation – which Indian teachers are yet to achieve.

Automated self driving cars, personal assistants like Siri (iphones), Cortana (Microsoft) and Google assistant where AI is replacing human company and agency.

Policing and crime control could see AI detecting signs of unrest and deployment of forces faster than human police. Facial recognition and lie-detection are yet another domain where AI is posed to exceed human intelligence. Not only local policing, but military could use AI for signature strikes by UAVs (unmanned aerial vehicles). Infiltration detection and border management using AI technology coupled with sensor based detection are the latest trend now. This all could surpass human surveillance. Trend analysis from big data to detect suspicious acts would put CCTNS, NATGRID of India to optimum use.

Research as well as policy making is increasing driven by big data and evidence base. Big data which seems incoherent to human eyes is AI's forte. Space research, climate change research and weather prediction from big data trend analysis is where AI has already surpassed human intelligence.

While AI is increasingly turning our intelligence to obsolescence, have there been comparable benefits?

Benefits have been seen in enhancing productively of human workers – who now use machines/robots instead of manual labour. This has shifted human labour to a higher skill level and economy to a higher growth path.

In service delivery AI could – if trained so – end biases inherent to humans and ensure progress to more inclusive society. AI could potentially help end human miseries like anti microbial resistance, climate change pest attacks, crop loss by timely action.

AI could also reduce wastage of inputs in manufacturing services etc. thus enhance efficiency of living. For e.g. AI driven cars would communicate with each other and reduce fuel loss due to braking. Timely action by foreseeing accidents would also save lives. Lives could also be saved by early detection of diseases and action.

However, this would not be without losses. Automation would cause loss of jobs. Feedstock of AI is data – and today collection of data causes lapses of privacy. It is thus pertinent to prepare for such challenges. Humanity needs to identify sectors where AI cannot replace humanity and up-skill in those sectors.

Alibaba CEO Jack Ma, in World Economic Forum identified them as intuition of humanity. Being data and logic driven AI can never be intuitive.

Areas of philosophy, compassion and development of ethics are where AI cannot surpass humans. Emotions are an inherent trait of humanity. Despite coding and data, humans are capable of wider range of emotions – AI will never make humanity obsolete.

Team work, sociability are yet another trait. Social cohesion is a trait which cannot be ingrained even in Sophia (Hanson computer's AI robot which got Saudi citizenship). Not only would these sectors give us an edge over AI but also develop us into a better society.

Similarly, while AI can replace human intelligence in search of legal precedents but AI cannot replace human intelligence in developing the idea of justice. The idea of justice is where the solution to AI challenges lies. We need to ensure gains of AI are equally distributed. The economic growth due to AI should be inclusive. National income due to AI should not go to the industry only. But the governments need to levy a 'technology tax' to provide for the welfare of those laid off.

Governments globally need to agree on a Geneva like convention to safeguard rights of all. Privacy should not be sacrificed at the altar of AI. Governments need to agree on non-military use of AI to ward-off another race of weaponization.

Governments needs to develop a code of conduct nationally too. Skilling of workforce and digital literacy for all should be the way ahead. Corporate as well as governments need to cooperate to regulate AI and its growth for a better sustained tomorrow.

Civil society organisations have also played a role. IT for change has been campaigning for inclusive growth by AI. Tech titans like Google, Microsoft, and scientists like Stephen Hawking have suggested ways to regulate AI.

On individual level one needs to prepare self for a tech enabled tomorrow. Just like any other technological revolution, so for AI has the potential to elevate humanity to a better future if used productivity so that we summon an angel not a demon.

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17

Is Data The New Oil?

Abhishek Saraf, IAS (AIR 8 CSE 2019)

Post-industrial revolution era of the last 200 years has seen economic growth on the back of machines fuelled by power of oil/coal or gas. This led to rapid economic growth and wide gaps between the industrialised countries and others. Today the global GDP has moved past $100 trillion. However the pre-eminence of oil/fossil fuels in economy is falling.

The industrialised countries of yesterday are becoming services dominated economies now. Knowledge economy today is being increasing fuelled by data. Ninety-five per cent of world's data was generated in the last 3 years. This has led economists to question, would data be the new propeller of global economy, would data be the new oil?

In this essay we shall explore the similarities and dissimilarities between data and oil. We shall see how data is something much bigger than oil – how it's potential for good and bad lies beyond oil. We shall conclude by looking at solutions to challenges and opportunities.

Oil/fossil fuels marked the turning point in global economic growth in the form of industrial revolution. It shifted the world from primary sector to manufacturing sector decisively. Those ahead were able to reap windfall advantages like the British. In 1100 India and China formed about 50% of world economy, by the end of 19th century they were reduced to a miniscule of <10%.

Similarly, data today is being used by the west to provide digital service globally. Consultancy, artificial intelligence, target market advertising based e-commerce, software services have propelled the growth from manufacturing led economy to service led one. This is shown by less than 10% share of manufacturing and over 75% share of services in U.S. economy. Rise of e-com billionaires is another example.

Oil changed the structure of global power. In the West it fuelled rise of capitalist countries, led to colonialism and imperialism. In Middle-East rise of countries like Saudi Arabia have changed global power equations and alliances. This has irreversibly altered global history. Wars have been fought for control over oil reserves e.g. Gulf War 1990s.

Similarly, data has shown the potential to change the direction of democracies as seen in recent 'Cambridge Analytica' incident. Moreover data is the fuel of artificial intelligence. As per the prophecy of Russian President Vladimir Putin – the country which owns the most powerful artificial intelligence will rule the world.

Discovery of oil led to global quest for oil and it continues even today. Chinese interventions in South China Sea, Vietnamese offshore projects, Arctic explorations, India's own offshore exploration, and global invasions like one of U.S. in Iraq were primarily to secure long term oil assets.

Similarly, data is being absorbed by global multinationals (MNCs), governments. Government projects like NATGRID, Aadhar, Chinese steps for data localisation, provision of free services in exchange for data by MNCs show global quest for data.

Oil has been sought by non-state actions, terrorists like ISIS to fund and fuel their war. Saudi wealth has been long known to have been used to fund Pakistan-sponsored terror in India.

Similarly, now data is being sold on dark web/deep web. This data pertains to ordinary people and is obtained by hacking of secure servers. Proceeds obtained can once again be used for terror funding.

Thus far we have seen the similarities between data and oil in economic, political and terror domains. Let's explore differences between data and oil.

Use of oil has caused global warming pollution. This has caused oil to be seen as dirty and a quest has been launched for alternative fuel. As per international energy by 2040, 40% of world's energy would be non-fossil fuel based. Hence oil is polluting, limited and replaceable by renewable energy. However, data is digital and non-polluting. Every human being, incident-metrological, geological, physical, chemical can be a source of data. Data is virtually limitless only limitation is our collection storage processing. Also, yet no replacement of data has been proposed.

Oil/fossil fuels are geographically dispersed and globally non-uniformly distributed. This makes access ownership uneven and unequal. However, every individual has potential to be source of data. Access is uneven only due to digital divide which is narrowing sharply. Further, legal frameworks can be designed to ensure access to be uniform to all. Cloud computing further eases access.

Oil fuelled innovation in industrial era. But that innovation was based on energy source, today even renewable energy can cause similar innovations. However, data has the potential to fuel innovations in our economy. This is seen in service sector start ups, new service delivery models. The very fact that 6/10 youth in India by 2035 could do jobs that have not been created shows the widest potential of data-driven innovation.

Oil does not lend itself to a direct role in governance. Only as an indirect foreign exchange resource can oil lead to wealth of a nation. However, data can be used eminently

for data driven policy making based on evidence and feedback. This helps more citizen centric governance by targeted delivery of services.

Uses of oil are very limited – as a fuel and by-products. However, uses of data range far and wide from research, disaster prediction, management, policing, crime control, healthcare diseases burden surveillance and targeted supply of resources. Market decisions are now increasingly driven by use of customer preference data. Several banks use data for credit worth assessment. Consultancy sector, ecommerce is highly data driven.

Not only the uses and opportunities but threats due to abuse of data are much grave. True, that oil has been used to fund terror and caused wars. But data itself can be used as a weapon. For instance genomic data can be used for designing of pathogens to eliminate specific races, ethnicities etc. selectively. This could take terror to a whole new threat level.

Data can be used for surveillance as seen in PRISM Snowden leaks. This would be used to curb dissent, subvert democracy with utmost privacy and discreetness. Thus, posing greater threat to democracy than blatant authoritarian regimes like Stalin's Russia.

Further, incidents like Cambridge Analytica, social media echo-chamber would, coupled with psychological profiling, could attack the heart of democracy – without the voters even realising it – thus no chance to protest it either.

While trade in oil affects current account deficit explicitly, data highways pointing west don't show any explicit loss of forex. Only a deep analysis shows loss of service sector business opportunities.

Thus, we saw there are significant similarities and dissimilarities between oil and data. There are few challenges associated with data and significant opportunities too. Way ahead would be to prepare the masses to best exploit the opportunities and prepare for the challenges.

Preparation at global level would involve agreements between countries on the lines of Geneva Convention about legitimate reasons for sharing data – e.g. security, tax administration, justice delivery etc.

Democratic governance of global internet infrastructure could help use of data for the welfare of humanity – rather than cartelisation as seen in OPEC countries.

At national level countries need to come up with a legal framework to ensure privacy, strict laws on transparent framework for state surveillance as well as data protection. European general data protection rules, India's data protection bill are examples. EU–US Privacy Shield agreement could show harmonisation of global laws for cooperation.

Further, measures to ensure universal equitable digital access, digital sovereignty, net neutrality as well as uses/collection consent as well as right to be forgotten, data breach rights could help ensure data becomes oil for human welfare and world becomes a secure place to live in.

Strengthening Healthcare System in India – Is Privatisation the Only Answer?

18

Abhishek Saraf, IAS (AIR 8 CSE 2019)

Welfare state of India aims to provide universal healthcare to its citizens. While not a reality yet, but public healthcare does aim at cheaper and quality primary, secondary, tertiary services. A chain of primary health centres to distinct hospitals has been set up. But was it not a failure of public healthcare when over 60 children died due to shortage of oxygen in Gorakhpur due to a seasonally recurring disease. How do we trust public healthcare when a man has to carry his pregnant wife in labour to a hospital on a bicycle?

Clearly private sector is needed. But on the other hand, Fortis Hospital in Delhi charged over ₹ 6 lakhs for dengue treatment for a girl who eventually could not even be saved. When such criminal breach of trust runs deep in private healthcare, can it be called on to strengthen healthcare exclusively in India?

In tug-of-war of shifting responsibilities – private or public, there is only one clear loser. The 6 crore Indians who fall below poverty line due to healthcare expenditure. Society as a whole suffers loss of productive human capital – the present as well as future-generations due to weakness of healthcare. Only a combination of both public and private sectors can strengthen the weak healthcare sector in India.

Healthcare in India suffers from several weaknesses. They range from quality of care and skill of professionals and their members, social security, out-of-pocket expenditure, accessibility and affordability of care. Sectoral neglect of mental and geriatric health and divides like rural and urban, rich and poor have posed serious challenges to healthcare in India. Few of these could be addressed by privatisation.

Privatisation would entail market based competitive delivery of healthcare like any other services – perform or perish scenario would compel hospitals to provide quality care. This can be seen in tertiary, super speciality care which has put Kerala on the map of global medical tourism.

Tertiary care by privatised healthcare institutions would alleviate government from fiscal burden. This becomes imperative, considering government spends meagre 1.5% of GDP on healthcare. Government could use services of private sector through 'Strategic purchase model' to fulfil any crucial needs.

Purchase of service by government could also be done for poor through insurance models like seen in National Health Protection Scheme – thus alleviating government from burden of direct delivery and ensuring quality care.

Moreover, a blooming private sector would attract the best human-power-doctors and allied staff. Private hospitals as training institutes under proper government regulation could help offset the current shortage – (1/1,676 as against 1 doctor per 1,000 people recommended by WHO).

Private sector would also be encouraged to reach out to the marginalised as seen in Pradhan Mantri Surakshit Matritva Yojana. In this scheme private practitioners voluntary render consultation services to pregnant women every month. Further, CSR initiatives could help channel profits for public welfare. Newly emerging social enterprises in healthcare are the future of this sector.

Looking ahead private sector globally has taken lead in pharmaceutical research. Research in both pharmacy and overall healthcare would get a boost by massive participation of private hospitals.

Further, private sector would also help breach rural urban divide through initiatives like telemedicine, e-hospitals, Indian Academy of Paediatrics Health phone and digital diagnostics thus, strengthening healthcare in India. However, having analysed the benefits of privatisation it is only prudent that we look at pitfalls.

Textual precedents show a pragmatic approach is needed. Market dominated healthcare model would exclude those who cannot pay. Private sector would have no profit-incentive to invest in either rural healthcare or primary healthcare. In a country where 80% of poor live in rural areas, can we really risk that?

Solution can be found in NHPS/RSBY model. Precedents show that presence of moral hazard, over-charging, information asymmetry could lead to exploitation of patients to their exclusion. Collusive corruption with insurance partners could lead to wastage of resources.

In a country where 60% of healthcare expenditure is out-of-pocket, can sole reliance on private sector be the key? Cases like MAX hospital overcharging, unnecessary procedures, insurance frauds hardly inspire confidence.

Further, in our society several eminently treatable diseases like leprosy, mental health disorders are subject to stigma. Stigma causes abandoning of the patients by their family. Can private sector cater to those unfortunate individuals whose right to life and dignity has been risked to verge of denial. Similar is the case of old age problems of senior citizens. Would it not eliminate the accessibility of healthcare to them?

Moreover, several reports like Global Burden of Diseases have shown how private sector in India fails at mandatorily reporting of diseases like TB, AIDS. With no active interest in long term health of society would private sector invest in healthcare and

rehabilitation of drug addicts? Initiatives like family planning, organ donation and blood donation would hardly attract private attention.

Profit motive often blinds the market players to unethical practices. This is seen in kickbacks in medical sector for prescription of costly drugs in place of generics. Clinical trials are another domain where active involvement of government is necessary. Empathetic delivery of healthcare would suffer when healthcare becomes a business.

Thus, clearly a combination of private and public sector is needed as both have their strengths and their weakness. The strengths of the private sector has been discussed earlier. The weaknesses could be solved by active involvement of government thus necessitating public healthcare.

National health policy directs the government to spend 2.5% of GDP to healthcare. Focus of government should be on primary healthcare. Strategic purchase along with NHPS from empanelled hospitals in competition with public tertiary hospitals could ensure cheap, inclusive and quality healthcare for the last man.

Further, regulation by government in terms of education, ethics, and curriculum could be done through reform of Medical Council of India. Active involvement of all stakeholders would be the key here – leading to minimum government intervention and maximum governance.

Price regulation could be achieved through Pharma Sahi Dam Application as well as initiatives like Drug Price Control Order. Frequent revisions of National list of essential medicines along with trade margin rationalisation, voluntary licensing could achieve affordability and accessibility in Pharma sector. Generics could be promoted under Jan Aushadi Scheme. Quality could be maintained by mandatory bioequivalence studies. Health being state subject – here cooperation of state and central regulators is necessary.

Moreover apart from wholesome sectoral interventions could help government initiatives like early childhood care under ICDS, National Health Mission – rural and urban could help BPL – children and adults. Poor performance on IMR, MMR could be improved by schemes like PMMSY, PMMYY.

Moreover, initiatives like mission Indradhanush could help reduce incidence of diseases. Government involvement is necessary to promote vector-borne disease control programmes. Healthcare of adolescents through SAATHIYA, family planning by Prerna could lead to welfare of present and future generation. This has to be an exclusive responsibility of public sector.

Most importantly, government intervention could help end knowledge asymmetry between patients and private healthcare providers through 'my hospital' initiatives. Grievance redressal is a role of government as well.

Beyond all this, there is a need for interventions that would reduce the need for hospitalisation itself. Government needs to focus on 'Swachh Bharat Abhiyan', National

Nutrition Mission, Sanitation and Clean Drinking Water. This could reduce incidence of communicable diseases and loss of immunity.

Focus has to be on preventive healthcare, AYUSH system as well as health and wellness for a sustainable happy living. Focus on nutrition security along with food security would help realise the right to health for all. This would relieve us of the challenge of stunting, wasting and underweight children.

Several global models like that of Cuba, Vietnam or UK, domestically models of Maharashtra and Tamil Nadu are available. Most of them emphasize of role of public and private together playing on each other's strengths. Several NGOs have taken lead like – Arogya Netram, Health for India have done some excellent work. They need to be promoted.

With joint efforts via public-private-people partnership we can realise the dream of universal healthcare in the welfare state of India. A robust healthcare sector would lead to security of mind in healthy body to a progressive nation on path to sustained rapid inclusive growth.

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19 Diversity in India, Does it Better or Fetter the Economic Growth

Ankush Kothari, (AIR 429 CSE 2019)

A 1932 classic dystopian novel, 'Brave New World' by Huxley talks about a society where no class or social differences exists. Everyone is cloned by the state to make population homogenous, brain washed to prevent any diversity thus to provide as labour for economic growth, with no questions asked. However, it only backfires as even Darwin has advocated need of diversity for better growth and adaptability.

Above context brings in the debate regarding multi-diverse country like India whether its diversity is assisting or hindering the economic growth. In this essay, we shall analyze both the aspects carefully.

India has been hailed as a land of diversity. Mukhya Upanishads talks about the concept of 'Unity in Diversity'. India has seen ages, various explorers and travellers coming to the peninsula to observe, cherish and learn from its diverse nature.

India is diverse in linguistic, religious, ethnic, geographical, territorial, economic, social aspects. National diversity has led to a mosaic model adopted by us, which welcomes and supports various groups, thoughts and practices. Indian democracy is the biggest example of accommodating and integrating its diversity.

At an international level, the diversity has boosted economic growth by promoting innovation, varied thoughts of inquisitive nature and inventions. Examples of Sir Abdul Kalam, Homi Bhabha, V. Sarabhai etc. are before us. TISCO (by Tatas) set up the base for economic growth of India.

At societal level, diversity helps us in growing economy in a multi-faceted way. Women provide for eco-feminism, basis of care economy and designing better policies that are sensitive to public. Transgenders in army and police, elders sharing their wisdom and children as the future of tomorrow can shape the destiny of Nation.

Geographically, diversity has helped in tourism. India's diversity ranges from Himalayas to peninsula, deserts to seas etc. This has led to a better economy as it helps in forex earnings. Also, GI tag in various parts as Tirupati Laddus, Benaras Sarees etc. helps in better economic growth.

Tribals provide for very crucial and valuable medication and traditional knowledge. Linguistic diversity has been documented to provide the basis for academic research. For example, Sanskrit is a scientific language is used in statistical models and computing.

Diversity not just in these, but in agriculture (crop diversification), industries etc. can boost our exports and increase India's competitiveness globally. A young workforce, skillfully and diversely trained can supply into various roles from architecture to handicrafts making.

Territorial diversity has immensely contributed to economy and security of the nation. Gorkhas provide for one of the largest and finest segment of Indian army. It is said that, if a man is not afraid of dying, he is either lying or is a Gorkha. Various sports person from north-east like Mary Kom, Baichung Bhutia have raised India's prestige.

Diversity in politics provides for constitutional safeguards to minorities and vulnerable, diverse groups that aim at protecting, developing and achieving their full potential in contributing to the Nation (Fundamental Duty). Rajya Sabha is an excellent example of giving representation to the diverse voices in the development of country.

Even at global level, diversity brings immense gain for India as it enhances its soft power (Yoga, Bollywood, culture, tourism etc.) and Indian diaspora, the largest in the world, provides valuable remittances to India ($80b alone in 2018). Clearly, diversity has helped in better economic growth.

However, all that shines is not gold; diversity in a way has also fettered economic growth in several ways, one simple example would be the invasion and colonialism of India by foreign powers as Indian subcontinent was too diverse to be united against exploiters. Africa is another case in point.

Religious diversity in India has often led to rise in communal conflicts, riots and clashes. One dark and major event in history of India would be partition of 1947 which not only shook us morally and politically but also economically as resource rich (Baluchistan) and fertile Indus floodplains went to Pakistan.

Linguistic diversity led to clashes several times, starting from 1953, Vishal Andhra movement to the Punjabi Suba demand to recent GTA issue in West Bengal over imposition of Bengali language are few cases.

Diversity has also compromised economic growth by giving rise to 'sons of soil' doctrine, movements for separation as Khalistan, Nagalim etc. came to picture. Even the complex diversity in Jammu and Kashmir over Ladakhis (Buddhists), Kashmiri Pandits (Hindus) and Muslims in the valley led to the bifurcation of state into two Union Territories.

Article 35A had impeded economic growth, investment in J&K over 70 years and after abrogation too, internet shutdowns has caused a non-conducive environment. Tackling diversity in a way that it can see better economic growth is yet to be seen in J&K.

Other issues associated with diversity are Dalit lynching, intolerance that puts a ban over creative experiences that are considered as a threat to Indian diversity. It degrades India's credit rating and leads to human rights issues which in turn affect confidence of investors.

Migration and minority rights have always been at the forefront of development debate in terms of inclusive growth. Recent exodus of migrants originating from UP and Bihar from Gujarat and Maharashtra affects labour availability. Minority protection and development has always been a contentious issue for India.

Development-Displacement debate in case of tribals has affected various projects related to dams, mining and industries. As a result of stalled projects and delayed land or environmental clearances has affected ease of doing business and caused a rise in NPAs.

If diversity has fettered economic growth in some aspects then the solution for better economic growth too lies in diversity. Inclusive growth, regional development and respecting federal features of the constitution provide the way out for faster, sustainable growth.

Para diplomacy can help in the cause. It means empowering states to attract investments by establishing diplomatic relations, without Centre's help. It can help in tapping investment for smart city projects, solve river water disputes and lead to reducing disparities.

It can also be used as a tool for diplomacy. Soft power is enhanced via diversity. Indians in Canadian Parliament, UK, etc. provide opportunity for better partners.

Therefore, by effectively utilizing India's diversity by providing decentralization, autonomy of funds, functions and functionaries, India can very well be on the path of becoming USD 5 trillion economy. There is a need for constructive debates in Parliament by diverse parties and promotion to free thoughts, ideas and expression.

India as the land of non-violence, tolerance, truth, compassion embodied by Mahavira and Buddha, can become a global superpower by leveraging its diversity and ensuring inclusive growth. Better economics is often reflected in better policies shaped by grassroot and participatory democracy. Diversity thus can better economic growth via e-governance and inclusion (spatial, financial, and digital).

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20 Evolution of India's Foreign Policy: Continuity and Changes

Ankush Kothari, (AIR 429 CSE 2019)

'Ultimately foreign policy is the outcome of economic policy and till India properly waives her economic policy, her foreign policy will rather be vague'

– J.L. Nehru (Constituent Assembly 1947)

A nation's foreign policy is shaped by several factors like economic, geopolitical, strategic interests etc. but the most important factor is the National interest above all (Machiavellian Doctrine). India's foreign policy has been to several phases of change yet has maintained its connectivity in several spheres. Aspects of strategic autonomy, territorial interest and universal values of peace and freedom are always respected and cherished by India.

Since ancient times, India has maintained ties with foreign rulers. Indus Valley civilization had links (though less political, more economic) with contemporary civilizations of Mesopotamia, Armenian etc. for trade and commerce. Ashoka sent Dhamma officials for preaching values of peace and non-violence. Chola kept strong navy to advance their interests, Alauddin Khilji and Mohammad bin Tughlaq prevented Mongols from entering into India.

However, the Britishers succeeded in capturing the 'Golden Bird' of the time. They also evolved their own version of foreign policy for their petty interests. Dreaded by Afghans, ring-fence policy of Hashing, policy of proud reserve by Lytton or forward policy of Auckland, their foreign policy maintained the elements of change and continuity. It was only post-independence that independent India could evolve its own foreign policy. In this essay, we shall examine various phases in the evolution of India's foreign policy.

Phase-I: Ideological Period of India's Foreign Policy: [1947-1962]

India's foreign policy just after the independence was marked by strong sense of Nationalism continuing from the freedom struggle. The focus was more on improving the domestic situation of illiteracy, agriculture, etc. In the international affairs, we went with the continuing principles of M.K. Gandhi which led us to come with NAM and panchsheel.

Though India was offered a few opportunities to enter the world geopolitics and being the world's largest democracy, chance to spread her ideals institutionally. Mediation in the Korean peninsula and UNSC seat (1955) to name a few. These were the examples reflecting India's importance in the global arena.

However, the ideological approach didn't bear much fruits as we offered the UNSC seat to China instead of keeping it for ourselves. The implications of this are much visible today when we are fighting tooth and nail to get the permanent stature in UNSC and China is blocking our candidature. Panchsheel's failure resulted into 1962 war as we accepted Tibet as a part of China instead of voicing against it and it ended the buffer. Also, decision to take Kashmir issue to UN proved disastrous as it made a bilateral issue an international one.

Thus, the failure of ideological approach, overlooking the defence sector, lack of tilt towards any superpower (NAM) and allowing China to grow steadily yet assertively resulted finally in defeat in 1962 war which broke the chains of ideological dreams and forced India to adopt a pragmatic approach under the new PM.

Phase II: The Period of Pragmatism (1962-1991)

The hangover of phase I of India's foreign policy and back to back 2 wars in 3 years resulted in boiling domestic situation. Famines of 1965, 1966 made it worse and India had to turn towards US under humiliating PL-480 program for food grains. However, India had already begun to take pragmatic steps by now, in the evolution of her foreign policy.

Enhanced focus on Defence sector led to India's victory in 1965 war against Pakistan. Going a step further, India became instrumental in the creation of Bangladesh from East Pakistan which clearly showed India's changing foreign policy from passive to an active Nation. Though, it maintained continuity by not following any bloc in the Cold war and remained with NAM, the new outlook was certainly pragmatic.

A change came with US's Nixon-Kiesinger policy of 'tilt towards Pakistan' and it openly supported Pakistan too, in the 1971 war. India with the help of Soviet, resisted this but clearly realized that to protect its national interests, it must come into the select league of countries. Hence, 1974 Pokhran test made India 1st non P-5 country to try nuclear capabilities. India also started interfering in other neighbouring countries' domestic issues like preventing the coup in Maldives 1988 (India was asked to intervene) and LTTE issue in Sri Lanka (proved disastrous).

Increasing role in foreign affairs, failure of Sri Lanka domestic affairs intervention, all time low with US relations etc. coupled with the perils of being a close economy led to 1991 economic crisis. Long pending reforms, balance of payment crisis, foreign exchange all time low, shortage of food supply, export pessimism and license raj leading to deadlock in domestic growth of industries, made several political-economists ask the question: Does the Elephant Dance?

Phase III: Economic Diplomacy at The Forefront of Foreign Policy (1991-today); [continuing with other changes too]

'No power on Earth can stop an idea whose time has come' [Victor Hugs] this was quoted by Dr. Manmohan Singh while introducing India's New Economic policy based on liberalization, privatization and globalization. The Elephant had to dance as it became inevitable with the 1991 BoP crisis, collapse of Soviet Union and changing geopolitics and geo-economics.

India as the founder member of WTO, thrusts the need of economic changes vital to shape the foreign policy. India established formal diplomatic relations with Israel, joined various trade blocs: ASEAN, G20, Indian Ocean Region also became pivotal to India's growth and diplomacy.

However, there was a change in world's equation with bi-polar world reducing to uni-polar only to re-emerge as multi-polar. Pakistan acquired nuclear power capabilities and other nations also tried to test their nuclear weapons. India's national security interests pushed her to do test nuclear weapons in Pokhran-II (1998) as she is surrounded by two hostile neighbours. This received condemnation from the world and many countries like Australia, Japan etc. cut the diplomatic ties and stopped ODA (Development Assistance).

Thus, along with economic diplomacy of being an open economy, India adopted another outlook in its foreign policy (not a separate phase though, as economic diplomacy still continues today), i.e. of de-hyphenation. This brought India closer to US, while maintaining ties with Russia, then, resulting in the Civil Nuclear Agreement (123) in 2005.

De-hyphenated foreign policy can be seen in India managing its foreign relations diplomatically with both Israel and Palestine at the same time, Israel and Iran, Iran and Saudi Arabia, and most importantly with US and Russia. India's stand on Palestine and didn't accepting Jerusalem as Israel's capital (despite US did) reflects India's active as well as assertive foreign policy. Space diplomacy is a major part of it.

Continuity in India's foreign policy can also be seen with continuing to vouch for peace, non-violence, extending diplomatic and economic support to least developed countries, fighting against violation of Human Rights etc. It has continuously pressed for CCIT in UN and called for a global fight against terrorism. Its stance on NPT and CBT remains same of being discriminatory and thus, is unwilling to sign even today, as it calls for no-first use and universal rid of nuclear weapons instead of dividing world into 'haves' and 'have not'.

India's stand on respecting sovereignty, territorial integrity and strategic autonomy is seen on its Kashmir stand. It has voiced against China suspicious Belt and Road initiative and till date has not joined it as it undermine India's sovereignty and territorial integrity. In the South China Sea issue, it has maintained that rules based order should be followed

for a free, open, prosperous Pacific with freedom of navigation and over flight. Act east and look west policy are elements of India's role in foreign affairs.

India's increasing global dominance can be seen in the US recent National Security strategy by Pentagon, where it has accepted India as the net security provider in Indo-Pacific region (renamed from Asia Pacific to highlight India's role). Groupings like QUAD, SCO and BRICS show as well as present India an opportunity to emerge as a global power.

However, certain challenges persist. With abstaining to vote on UN resolution on Libya and Syria, silence on Myanmar's persecution of Rohingyas and Israel's atrocities in Palestine and Saudi Arabia's Yemen episode reflects India's passiveness in foreign affairs in bit to maintain everybody happy. To emerge as a global player in geopolitics and keeping its continuity with Gandhian ideals of being a champion of human rights, India must address it to enhance its 'Smart Power'.

Still, India's foreign policy has shown a substantive change as she is a potential candidate for UNSC. Her stand on environmental sustainability is in line with 'politics with principles'. Also, there has been total continuity in neighbourhood policy as first and the most important. Non-reciprocity and mutual respect dominates everything.

Thus, India's foreign policy has evolved as per the time and has helped India in becoming a major player in the international affairs, managing its international relations in conformity to its National Interests. As Nehru quoted,"The art of foreign affairs lies in finding what is most advantageous for the country".

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21

Gender Equality: Myth or Reality

Ashutosh Dwivedi, IAS (AIR 70 CSE 2017)

"Where women are worshipped, there the Gods dwell."

- The Rig Veda

These high ideals are the hallmark of status of women in Indian society but the actual ground situation seems patchy and this gives rise to the debate whether gender equality is a myth or reality.

The society is characterized by many dichotomies and status of women presents a classic case of such dichotomy, where even from ancient time, we see existence of multiple standards.

During Vedic times, on the one hand we see women like Apala, Lopamudra who have written verses in Vedas and on the other hand, we find terms "Gahapati", which clearly denotes the male head of household. "The Pati Manusmriti", during first millennium showed that women's position further deteriorated.

If we take a look at mythological epics and treat them as depicting the situation of society, and not for their mythological value, we see existence of both gender equality and inequality – on one hand we have Shurpanakha, a lady bold enough to ask for the hand of Rama in marriage, while on the other hand we have Sita, who got abandoned by her husband for no fault of hers and even after going through the test of so-called purity. And this has to be underlined that we are talking about the Queen of the kingdom, let alone the common women! During medieval times also gender equality appeared to be a myth because of almost complete social ostracization in the form of Purdah and simultaneously we have example of Razia Sultan who became the ruler, even though that was not "because of" social conditions rather "in spite of" the social condition.

In present day modern world, the difference has become even starker, and the pace of divergence between myth and reality is even higher, as the overall social situation are characterised by high dynamism.

The dream of gender equality appears to be realty when we acknowledge that India has already have a female Head of state and Head of government a feat not yet obtained by the perceived advanced country like United States of America.

Increasing participation of women in public arena, breaking of glass ceiling by women like Indira Nooyi, Chanda Kochar, closing gender gap as shown by improvement in Indian's raking in World Economic Forum's gender gap index from 109th to 87th; all shows that there is some semblance of gender equality.

The days when women were struggling to be inducted in armed forces appear to be past us when we see that not only women are accepted in combat roles, but also a woman is today responsible for the defence of the country as Defence Minister.

For the first times the cabinet committee on security have two women in the form of Defence Minister and External Affairs Minister.

Globally also, things appear to be improving on gender front as gradually the participation of women is increasing and that too at all levels. It was a woman, Angela Merkel towards whom the whole world was looking at during the Syrian refugee crisis.

But the debate of equality being a myth or reality riles up once we start digging deeper. A constant increase in rise of crime against women in public sphere shows that though women are taking to public sphere, but they are constantly are at threat as a section of society cannot yet accept women as equal.

News of rapes and sexual assault have become so common that victims appear to be mere statistics, and the fact that in 90% of incidents, the perpetrators are known to women shows the gory reality behind the so-called civilised society.

The participation of women in paid jobs appears to be increasing but the female labour force participation rate of mere 15% in urban areas and 25% in rural areas shows that there is still a long way to go. Just pose it with the gender pay of 27%, and the myth of gender equality appears shattering.

If we go to deeper layers of the debate and try to find out why this inequality persists, we come across social structures, economic situations and historical constructs which help in perpetuating gender inequality.

The social set-up of a patriarchal society imposes multiple barriers and does not let women reach their true potential though, patriarchy is justified on the basis of biological factors like brain laterization, higher muscle to fat ration in men but gender is essential a social construct, otherwise why in households cooking is the work of female, where it is unpaid, while in hotels and restaurants, where cooking is paid employment, we see that most chef are male?

The conscious segregation of women from paid work and non recognition of the care economy dominated by women, gives rise to economic situation, where women are left with no social security and they become dependent on male and thus create gender inequality.

It is not that our policy makers are unaware of these problems and also multiple efforts are on towards converting the myth of gender equality into reality.

Our constitution, not only recognises the concept of equality enshrined in Articles 15, 16 and many other places, but also goes beyond equality and prescribes for favourable treatment to women and children as an exception to the principle of equality.

Various legislation like Harassment of Women at Workplace Act 2014, tries to make workplace a safer place for women, so as to increase their participation.

Recent Amendment in Maternity Benefits Act grants 26 weeks of paid maternity leave, which goes beyond the 120 standard of 14 week.

Programmes like Beti Bachao Beti Padhao, selfie with daughter, Sukanya Samriddhi are aimed at not only umpiring situation of girls, but also changing the perception of people towards girl child which goes at grassroot of gender equality remaining as a myth in our society.

Schemes like Nai Roshni, Mahila Shakti Kendra ,induction of mahila police volunteer (in Haryana Police), reservation of women in government service by Bihar government are focussed on empowering women.

The judiciary has been at the forefront of the mission of gender equality right from issuing Vishaka Guidelines in 1997 in absence of any law to protect women at workplace, and this time has been reinforced by banning instant triple talaq recently.

All these initiatives have their own positives and negatives but one turning needs to be understood that gender inequality is a social problems, and hence solution also lies in the society. Laws and state intervention will not be much beneficial in absence of social transformation e.g. in spite of having anti-dowry law since more than 50 years, dowry is still rampant because it has social acceptance, in spite of being illegal.

Transformation is needed at the level of society, community, family and individual level to accept gender equality as the norm.

Children need to be gender sensitised from school only, so that they turn into a responsible and sensitive citizen.

Youth need to be reminded of the value of respecting girls and accepting them as equals. In control of social menace like dowry, it is the youth who have to take the lead.

Changes are needed from grassroot level and at the level of social thinking then only we will be able to convert gender equality into a reality.

The Need of Debate

Regarding gender equality being a myth or reality itself shows the level of equality in society. The need of the hour is to move beyond the debate of gender equality and focus on women achieving their true potential and we should not be surprised if they even surpass the men, as this is their true potential, which they will certainly realise.

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22 | Cashless Economy – Challenges and Opportunities

Lavish Ordiya, IAS (AIR 18 CSE 2019)

Today morning, I woke up to the doorbell ring of milkman, only to realize I only had a ₹ 2,000 note but needed to pay ₹ 34. He happily accepted payment on Paytm. On my way to office; I stopped at a stall for tea and breakfast and paid him on PhonePe, and to my surprise a cashback of ₹ 12 on ₹ 55 transaction.

I need not stop to buy any ticket for the metro train to my office, as the metro smart card provides seamless travel across the city and I can recharge it online just like a mobile topup. As I reached my office, I got an SMS of the salary being credited to my bank account, as it was the last day of the month. I quickly transferred ₹ 15,000 to my parents using BHIM-UPI within 10 seconds. We have surely come a long way towards a cashless economy.

Starting from the barter system of economic transactions, to terracotta seals of Harappa, silver and gold coins of Harrapan civilizations, the beautifully inscribed gold coins of Gupta times to silver tankas of Iltutmish and Rupee introduced by Britishers to the BHIM of Government of India and even further cryptocurrency, the economy of transactions have gone through various phases to culminate into cashless economy of today.

A cashless economy can be simply put as an economy where most or all the financial transactions and exchanges take place without any physical exchange of currency or money.

It may involve the use of plastic cards like ATM/ credit cards, digital wallets or a direct bank account transfer. Banking system has a critical role to play in the entire chain as they form both the ultimate source and destination of the money exchanged. Cashless economy requires a seamless integration of all the units of economy like individuals business government etc. through banking channels.

Recent steps taken by government of India like Pradhan Mantri Jan Dhan Yojana, Small and Payment Bank, Direct Benefit Transfer, Demonetization, GST etc. have all given a significant push to the country towards digital economy.

The transition of the country towards a cashless, paperless economy presents both new opportunities and challenges.

The opportunities and benefits of cashless economy are multifaceted and for starting from the very obvious benefits of requirements of lesser bank branches, lesser ATMs and less staff resulting in savings and lesser cost of printing money and minting coins. It is also a safer option providing hassle free option of shopping, transacting without need to carry a bundle of cash in pockets.

The social benefits of this move are rather much bigger. The cashless economy has promoted financial inclusion within the country including access to credit, insurance etc. to all sections of the society including farmers, women, poor etc.

The Kisan Credit Card, insurance cover on Rupay Debit Card etc. are examples. This will not only result in reduced inequalities, but also reduced corruption and leakages through use of direct benefit transfer.

Further, the economy of the country benefits from the money multiplier effect resulting from increased circulation of money. The central Banks's monetary policy transmission will tend to be more effective in controlling inflation. This will help achieve the much needed formalization of Indian Economy.

The benefits also include lesser tax evasion & black money generation. This will ultimately also help control illegal criminal activities like smuggling, terrorism, money laundering and transaction strengthening the country's security.

In the political sphere it may be used to improve funding transparency of political parties, thus reducing use of money and muscle power in elections, crony capitalism & criminal politician businessman nexus. The peripheral benefits include reduction of prices of real estate, private education etc.

However, with new opportunity comes new challenges and needs for newer solutions and approaches.

In our country with less than 25% digital literacy and divide between rural and urban areas, the push towards digital economy seems to be rather forceful than natural. The case of death of Jharkhand girl due to hunger on not linking Aadhar Card to Ration Card loudly tells the reality. The digitally unaware rural people become easy targets of the fraudsters who extract details of their cards/accounts easily over phone.

Further, low penetration of banks in rural areas and hinterland, lack of internet connectivity and digital infrastructure poses yet another challenge.

Unavailability of applications in vernacular languages makes it difficult for a common man to use such tools easily.

In our society, several practices tend to be deeply associated with money and its physical form. For instance, among Muslims, depositing in a bank to earn interest is a sin. Use of coins on occasions of marriage, donations in temples etc. is yet another example.

The increasing cases of cybercrimes pose serious threat to the credibility of cashless transactions. UN International Telecommunications union has classified India as the fifth most vulnerable country in cyber safety. The recent cases of siphoning of funds from Banks of Baroda is a cause of concern.

Strategically, most of the payment gateway companies like Visa, Master Card etc. are located outside India and carry a huge amount of data and information about Indian consumers, posing serious data sovereignty and privacy concerns.

The possibility of misuse of data for kidnapping, extortions etc. cannot be ruled out.

Further it seems the use of cashless economy has further eased the job of terrorists and criminals who have been using it extensively for raising funds, financing arms and attacks. The emerging use of cryptocurrency has become a worry globally.

New challenges present new opportunities. Despite the problems, there are ways to work around and solve them through dedicated, focused and collaborated efforts. First and foremost, efforts towards digital literacy of the citizens through schemes like Digital Saksharta Abhiyan need to be promoted. Digital Infrastructure creation under schemes like Bharatnet, USOF need a renewed focus & funds. A strong legal framework at national level must be prepared in addition to amendments to IT Act 2000, in line with new developments.

Incentives to use cashless payment mechanisms through cashbacks, discounts are much appreciated. The recent limits on cash withdrawals in Union Budget 2019-20 will ensure elimination of black and informal market. Recommendation of Justice B. N. Srikrishna committee and RBI on data localization should be considered after multi-stake holder consultation with companies, Banks and international Bodies. International collaborations like UNESCO's Internet governance forum must be further explored to come up with global legislature to control money laundering, terrorist financing data breaches and control etc. through cashless medium.

In our goal towards moving to a $5 trillion economy by 2026, we must take structural reforms like cashless economy to accelerate our economic growth and inclusive development of all in the society.

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23 Daughters of India – Their Strength, Their Plights and Their Achievements!

Nikhil Rakhecha, IAS (AIR 197 CSE 2018)

"Women constitute half of world's population, perform two third of its work hours, received one tenth of its income and owns less than one hundredth of its property" says UN report published in the backdrop of international decade of women (1980s) plights of women in India are even worse. Deep rooted patriarchal social structure of our society governs entire life cycle continuum of neglect, abuse, discrimination and inequality in women's life.

Struggle in women's life starts even before she's born. Preference for male child turns fatal for them. Widespread incidences of sex selective abortions are prevalent in modern Indian society. If she manage to survive this ordeal, neglect and abuse that she had to face throughout her life makes her sad about why she even survived at first place. Neglect starts from denying right nutritious food to even basic elementary education, childhood is meant to be enjoyed only by male child in Indian society. As culture demands girl child needs to take care of household chores and take care of younger siblings. Only after doing this job, she could join her brother in leisure activities.

This discrimination increases with passing age. She's made to choose non-technical career, if she even allowed to complete schooling. As girl child is treated as financial burden by most parent only to be married of as early as possible thereby wasting least resources on her upbringing and career even in marriage least voice is given to her in choosing her life partner.

With marriage new journey of exploitation and abuse starts in the form of domestic violence. And culture prescribes any kind of protest to such acts. It places husband in ranking of god for women, thereby prescribes multiply tolerating any kind of treatment. Her whole universe revolve around husband, who also becomes her source of identity and status. Economically as well she is completely dependent upon her male counterpart.

If some brave, ambitious manage to get paid employment she had to face whole new array of hardship. First, there will be no sharing of domestic work even when women is involved in paid employment outside. Secondly she will be discriminated at work place

too. Unequal salary for equal work, involvement is limited to low paying, low status jobs. Even in formal organisation, glass ceiling exists which prohibits mobility of women to higher echelons. And not to mention abuse and harassment she might face at work place and in journey to and from office. Devoid of access to formal credit, she could not even start her own business. And she could be asked to sacrifice her whole career for family irrespective of her ambitions and goals.

But very few managed to get such exposure to economic activity, as female labour force participation in country is less than 21%, rest keep themselves busy serving needs of family. Even doing this would not be an issue, had their sacrifice received due recognition. But they are made to work round the clock, deprived of any appreciation and say in domestic decision making.

Failure to deliver male child would bring loads of abuse from family members and society. And death of husband would make inauspicious and blameworthy. Society ostracizes widows and leaves them to die in neglect and penury.

Compel this gender with disability and life would be hell for her. And so is the case with one belonging to lowest caste/class. Society exploits them with great impurity and backlash. Devoid of any political voice, their grievances are hardly paid heed to.

Through Panchayati Raj Institutes tried to give some political power, at very few places it had effectively empowered women. Representation in Lok Sabha is as small as 12%.

Even after such precarious scenario, in conducive environment and loads of challenges many women have left their mark in society. Political sphere being most visible one houses many charismatic women leaders. Mamata Banerjee, Vasundhara Raje Scindia, Sushma Swaraj are some such leaders. Even at grassroot level, many women Sarpanch are fighting against patriarchal culture and have managed to exercise independent authority.

In economic sphere through few to name are leading some of the largest organizations. Arundhati Bhattacharya, Indra Nooyi, Kiran Mazumdar Shaw. Some had to run away from country to escape from discrimination and pursue one's dream Chanda Zaveri being one such business women. Being forced to marry at young age and denied higher education she escaped to US and soon established multimillion dollar biotech firm.

Recent Olympics game result have depicted power of such resolve of daughters of our country. P.V. Sindhu, Sakshi Malik bagged silver medals for our country. In earlier world championship Mary Kom had brought many gold medals for country. Sania Mirza features among topmost tennis players of the world.

There are many other, recognised, unrecognised, appreciated and unappreciated women who'd brought glory to our country. Many are working selflessly and fighting against social injustice to make our society a better place to live for future generation. Women of Garhwal region started Chipko Movement which not only prevented deforestation and

degradation of environment but also inspired numerous future movements to save our environment.

Our countries daughter also had distinct role in freedom struggle. Picketing liquor shops to burning foreign clothes, spreading Swaraj's message to marching in rallies of Satyagraha women had contributed significantly in our fight against foreign rule. Sarojini Naidu, Annie Besant, Rani Gaidinliu are few such leaders. Some even took revolutionary path which was considered male bastion to secure independence for country. Veena Das, Pritilata Waddedar assassinated many British officials.

Through women movements they had ensured that they get equal recognition in the eyes of law and discrimination become punishable offence. Ending inhumane social practice such as Sati to gaining right to remarry for widows, securing right to education to reservation in local bodies, these movements are easing access to public sphere for women.

New feminist movements have kept gender justice and equality debate alive. Through numerous Acts such as Hindu Succession Marriage cut age old discriminations have been curbed. Domestic Violence Act, prevention of Sexual Violence Act, Public Place Act, PCPNDT Act are culmination of relentless fight of women to end abuse and violence against them.

But the fight and achievements have not reached to its rightful place yet. Women are far behind their potential. Patriarchal mind-set is yet visible coherently in most places. Change could not be brought only by government. Everyone has to understand necessity for such change first.

Recent McKinsey report had noted that India could develop at double pace if we bring gender parity at work place. Even Swami Vivekananda had said that if society is to survive it cannot afford to neglect other half of its population such as bird cannot fly on only one wing. The historical injustice should be done away by promoting participation of women in public sphere by provision of reservation in state assemblies and parliament. Schemes such as Beti Bachao, Beti Padhao should be implemented on mission mode.

Sense of security too have larger role in ensuring participation of women. Cohesive environment should be created at workplace. Gender disparity had been prime reason for our laggard growth. As 21st century is seen as Asia's century, we too can achieve our rightful place on the world but only if we shed our patriarchal attitude.

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24 Diversity in India: Does it Better or Fetter the Economic Growth?

Nikhil Rakhecha, IAS (AIR 197 CSE 2018)

With every 50 km, dialect and culture changes in India. It is home to nearly all major religions of the world. There exist more than 1,700 dialects and 250+ languages in the country. Unique culture and language was a major criterion for division of vision into numerous states. With the history of invasions, influence of foreign culture is clearly visible on domestic art and architecture.

Being the most diverse country in the world, many predicted that India would be balkanised into hundred Indias. Many attribute slow economic progress of country to diversity of race, religion, caste, language, ethnicity etc. In this essay, we shall discuss whether this diversity is better or fetter economic growth.

Diversity: Bettering the Economic Growth

Incredible India campaign of tourism ministry projects India as must visit destination. Unique culture and tradition of India has historically driven travellers and tourists from throughout the world.

Foreign tourists as well as new middle class out of their curiosity and willingness to experience culture take to tourism. From Naturopathy and classical dances in South India to hospitality of Rajasthan and Gujarat, from world heritage sites to pilgrimage all attract these tourists. Tourism contributes nearly 10% to India's GDP and one of the largest employees in service sector.

Diversity is also reflected in cuisine, clothes and culture. Revival of interest in trying out what is called tradition has led to demand of such traditional products. Hotels providing traditional foods (Rajasthani thali, Manipuri fishes etc.) to handicrafts and jewellery all contributes to business opportunities. Handicrafts are also one of the important element of country's export basket.

Unique culture associated with particular region creates feeling of regionalism. This is positive sense compels individual to work towards progress and betterment of region. Thus fuels competitive federalism. As tapped by NITI Aayog, states are competing

with each other to attract investment and transform their state into business friendly (Momentum Jharkhand, Dynamic Gujarat etc.)

Tribal and ethnic diversity which is largely untapped has huge economic potential. Traditional knowledge of tribals if patented could earn huge royalty for country. Recent case of Turmeric is one such example.

Diversity of culture is well trapped through geographic indication. Unique products of the region are heavily rewarded in domestic as well as international market. Mangoes from Ratnagiri to Roshogulla from West Bengal are exquisite examples of such products.

This diversity is also reflected in art and architecture. Madhubani painting from Bihar to Warli painting of Maharashtra. Similarly, temples of South India to music of North India, all are contributing to economy through tourism, business opportunity and employment.

Diversity could also be seen in geographic terms. India has vast coastline (7,500 km), lofty mountains (Himalayas), huge forest reserve (Western Ghats). Nearly all kind of geographical features are present in the country. And thus vital minerals such as iron, coal as well new energy resource such as methanol and shale gas. All these heavily contribute to economy.

Coming back to cultural diversity, Indian diaspora is most widely spread. With diversity of religion and tradition it has constructed a good brand with respect to the nation. Thus enhancing soft power as well as creating a market for Indian exports. Projection of India as tolerant and accommodative has helped to create goodwill which in turn results in more investment in the country.

Diversity: Fettering Economic Growth

Despite plethora of economic dividends brought about by diversity, it also accused of slowing down and at times reversing economic growth.

Starting with regionalism, which is strongly visible many a times works antithetical to economic interest of nation. For instance reservation of jobs for locals in Karnataka or son of soil movement in Mumbai. This restricts free movement of labour. Thus cost of labour rises for companies and it becomes uncompetitive.

Religious diversity when politicized creates communal conflict. Communal riots reverses the economic progress of region drastically. Precisely this insecure climate is restricting growth of J&K and other communally sensitive areas.

Similar conflict is also seen in case of ethnic diversity. Tribes of North Eastern region are perennially at loggerheads with each other by the Meitei-Naga-Kuki of Manipur to Bodos of Assam. All such conflicts creates unfavourable atmosphere for industries to develop.

On similar footing tribal conflict of Central India, guided by Naxalism against the state prevent any infrastructural development of the region. Diverse level of development among tribes prevented government efforts to be streamlined in even areas resulting into relative deprivation and associated conflicts.

Caste based diversity has also worked antithetically to economic growth. Occupational restrictions have prevented deserving from 'lower' caste to take up jobs. Prevalence of undignified jobs due to concepts of purity pollution prevents reaping of demographic dividend.

Such caste based stigmatisation spills over business as well as educational choices. It restricts the mobility of individual and confine them to unproductive areas of economy.

Caste and religious doctrine also comes into way of women while taking up paid labour outside their household. As depicted by Human development index while adjusting to gender inequality India loses significant GDP growth to such discrimination.

Linguistic diversity also hinders economic expansion. Globalisation meets with linguistic barrier and so numerous new technologies. Digital divide across language prevents adoption of such transformatory tool. This also puts barrier in movement of labour. Thus, they remain disguisely unemployed locally. Reservation of jobs on the lines of language is another instance of language creating barrier in economic growth.

Similarly religious diversity is spilling over economic sphere. Recent case of zomato over cancellation of order by customer on communal lines. Religious diversities creates atmosphere of suspicion and divide business as well as customer on communal lines. Recent cases of vigilantism has also affected numerous profession.

Harnessing Diversity for Economic Growth

Diversity in itself is not antithetical to economic growth. It actually creates potential to be harnessed for growth.

However vested interest and politicization of diversity makes it lag on economic growth. Many a times communal violence or ethnic conflicts are used to settle economic rivalry vested interest prevent economic development of minority ghetto.

This is essential to break away from stereotypes and uncover vested interests.

Start could be made from shaping our political attitude. Discarding leaders who use religion to garner votes. Appeasement politics should be boycotted.

Diverse language, tradition and customs should be preserved and promoted. TKDL portal under science ministry should be revived and patent for tribal knowledge should be filed. Through various tribal mela and portals such as Tribal hat marketing access be provided to reap economic benefit of such diversity.

Regionalism dialogue should be given a positive outlook. It is natural for individual to be aroused by regional issue and identify oneself with it. Thus through competitive

federalism and equality of opportunity overall growth of nation should be aspired. Balanced development should be taken up to reduce deprivation concentrated across religious or regional lines.

Affirmative action for vulnerable sections spread across religion, caste etc. should be taken up. Recommendations of Xaxa Committee, Sachar Committee should be taken up for implementation.

Diversity is not bane but boon in this rapidly homogenizing world. It has huge social and psychological impacts which help in economic growth of country with ancient philosophy of 'Vasudhaiva Kutumbakam' we shall embrace and promote our diversity.

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25 Ecological Consideration Need Not Hamper Development

Abhisek Oswal, IRS [(IT) AIR 154 CSE 2019]

Students remember that nature bestowed us with abundant riches. In return all it asks for is its co-existence with development. If humanity has to progress ecology and development have to co-exist or the latter gets eliminated. Ecology is not a hurdle but a facilitator in the developmental process.

With this Professor Sharma concluded his developmental economic class. But he said ecology facilitates development and is not a hurdle. This view of his left me confused. With rapid population growth, urbanisation, demands for food, job, shelter how can ecology facilitate development? I approached Professor Sharma for the enlightenment.

Me: Good Afternoon Professor (I wished him)

Professor (sitting beneath the tree in campus garden): Good Afternoon.

Me: Professor I have some doubt to be clarified regarding toady's class. How can ecology facilitate development?

Professor: (Asking me to sit down) what do you see around? Tress, lush green grass Don't you feel a little relaxed sitting beneath this trees, isn't the temperature a bit cooler here? Doesn't nature add up to the beauty of our campus?

Me: yes sir, I do agree with you.

Professor: see you got the answer for your question Nature and ecological consideration have led to aesthetical development of our campus. Also the micro climate it provides adds upto our productivity.

Me: (I said) wow! I never looked in this way. But sir always consideration of ecosystem stalls development?

I have read that major cause for the development projects getting stalled is due to no environmental clearance. This have led to piling up of non-performing assets. The banking sector have been reeling in ICU like condition. The credit flow for Capital expenditure have stopped. This have completely halted new investment, creation of jobs and slowed economic growth.

On one hand we are facing the demography bulge by adding 8 new children per minute. On the other hand we are short of land for agricultural expansion, urbanisation industries don't come up on time due to shortage of land.

We cannot expand into forest areas because of legal compulsion to pursue them. The increasing presence on land and its resources could not be eased with exploitation of ecological resources. Haven't too much ecological consideration led to laggard development?

Professor: when individual society and ecology are in harmony then it is true development. The problem of the world is since nature don't tax for the resources it offers, it haven't got the due attention. History says tragedy of commons have led to tragedy of mankind. Let me explain what happens when nature is not considered in process of development.

Indus valley citizens were nature worshippers. The worshippers took no time to turn into exploiters and what happened next is an open secret. Human intellectual progress is traced since the age of machines .i.e. industrial revolution. But today that revolution led to climate change evolution and is currently threatening the entire humanity.

Our own green revolution started with aim to acquire food security and self-sufficiency. But the unintended outcomes are enormous. Right from groundwater depletion in Punjab, Haryana to land degradation in the same region.

Our steps to develop agriculture without considering the agro-climate condition of the geography, substituting traditional crops with water guzzling ones have plagues the entire agriculture economy, making it unsustainable.

Reorganisation of states marked a new era in Indian federalism. But the political development did not considered ecological voices. This resulted in inter-state water disputes across the country. Iron, coal and many natural minerals were mined or rather I would say exploited in an unsustainable way. Resulted are eviction of traditional dwellers, decertification of land.

Bloodshed for water in Tamil Nadu or even south Africa or Bogota is this the model of development? You know one of the hidden reason for the Arab Spring was not considering the ecological assets?

Me: Yes I remember that due to overexploitation of oil, land degradation, eviction and drought led to food insecurity. This was one of the major cause of Arab spring.

Professor: Yes you are absolutely correct!

We have encroached into jungle which eventually leads to fragmentation, cut enough trees than ecosystem could hear, realise enough obnoxious gases than atmosphere carrying capacity. All this in the name of development led to air pollution, contamination of water, soil, man animal conflict.

You know, on average 56 humans are being killed by shark attacks, but 1,500+ sharks for pleasure. Who is the real predator?

Our ecologically isolated development have hampered our social development, poor being the worst hit groundwater pollution, lack of sanitation have resulted in undernutrition. Loss of livelihood due to droughts and rural districts have led to forced migration into urban areas. Here too they fight with slums dwelling, unorganised working, poor health and income.

On one hand, we have the green jungles and on the other we have grown concrete ones. The cities which are called economical workhouse gets stalled with a little bit of down pour you may have heard about Chennai floods, Kerala floods. The nature paid back humans in its own coin.

Marshlands which acted as natural super sponge have been completely encroaches. The lopsided development have left with event of floods in monsoon and drought in summer. You may be well aware with recent events on banks of Yamuna. The event aims for spiritual development at the cost of ecosystem and the result is total destruction of Yamuna flood plains which will have impact on future generation. Ecology only plays foul when human begins it.

Me: I have clearly understood the importance of ecological consideration in development. But isn't it too late to undo the changes? Have we awakened yet?

Professor: Gandhiji said "Our future depends on our present actions" the global community has woken up right since 1970's when we set 'limitss to our growth'. Economic growth was overshadowed by economic development, which was in turn overtaken by sustainable development.

From Montreal protocol to Paris Climate deal across the international community have been standing in solidarity to support the adoption of sustainable practices. Ecological consideration have allowed the men and nature be in harmony since ages.

Have you heard about qanat system?

Me: no sir, I haven't!

Professor: It is a desert irrigation system practised in Iran since 2000 B.C. and even today supports the Persian community to carry out their livelihood. Watershed management in Hivere Bazar and Ralegaon Siddhi have changed the life of the rural folks. Our own desert development program, afforestation mission is aiming towards as sustainable living. Harnessing solar energy has led to generation of clean electricity and also availed new employment opportunity.

Climate smart agriculture, organic farming is aiming to produce more with less without affecting the local biodiversity. Urban forestry is part of all greenfield cities, you know that in spite of tsunami waves sinking the Pichavaram coast, there was no loss of life. Mangroves acted as barriers, defending the villages from the waves.

From agriculture to disaster management, ecological consideration have become imperative.

Me: I can now imagine the value of ecosystem and ecological services. Thank you for enlightening me sir.

Professor: It was my duty to ensure you intellectual development.

Ecology consideration supplements our economic, social, environment development and not supplant it. Nature gives maximum towards human progress and in return asks nothing. It is our duty to make it an indivisible part of our life. We have to co-exist with ecology, ecosystem and nature if we have to exist, ignoring the former will only result in our eternal exit.

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Education is the Antidote to Poverty

Amrit Jain, IPS (AIR 96 CSE 2020)

Ramgopal is a rickshaw puller from Delhi. He migrated along with his family from Bihar. Laxman, his 21 year old son also accompanies his father to support the family. The family is barely able to meet their ends. One day while pulling the rickshaw near Old Rajendra Nagar which touches Karol Bagh, Laxman dreams about becoming an IAS. Two years later, he clears the exam with flying colours and rescues his own family from a poverty trap.

India inherited a poverty rate of 75% in 1951. The largest absolute number of poors are still a scar in India's growth story. United Nations has defined poverty as inability to meet the most basic ends. Rising to this challenge, the international poverty elimination has been made SDG-1.

The statistics of poverty present a grim picture. But what it fails is to present a roadmap for its elimination. The historical experience of the world points towards education as the panacea. This essay evaluates the necessity and sufficiency of education as an antidote to poverty.

HOW EDUCATION IS AN ANTIDOTE TO THE EPIDEMIC OF POVERTY

Before prescribing an antidote, we will first diagnose the problem. Is poverty a recent phenomenon? If not, how poverty in today's world differs from that of earlier times? What does education bring to the picture, which other solutions don't?
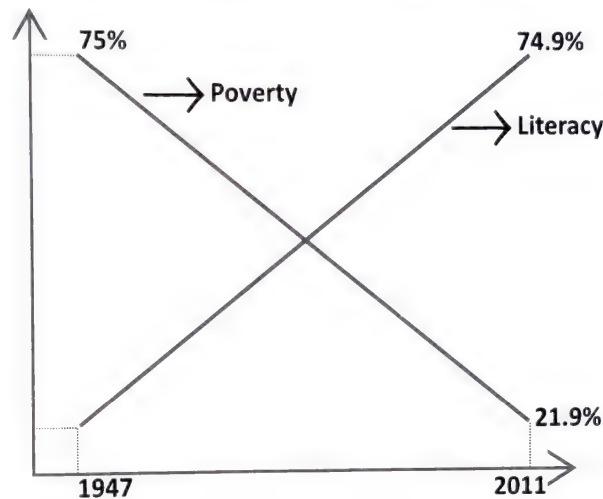
Poverty is not a recent phenomenon. It existed even when man was foragers. However poverty exists in many forms in modern times. There is an additional component of relative poverty which finds its origins in the Industrial Revolution. Moreover, today's poverty has expanded itself from socio-economic domain to cultural, ethical and psychological spheres. To support the above hypothesis, lets look at 2016 Oxfam Report. The top 8 richest individuals of the world have more than 50% of world's wealth. In such a scenario, even a millionaire might feel poor to such economic giants!

Now the role of education in poverty alleviation becomes easier to explain. Modern education system includes modern science, liberal arts, latest technological courses etc. All of them are high in demand. But this does not alleviate the abject poverty and the gruesome future of a poor.

Just in the case of Laxman, education at an individual level increases the financial stability. Our present Minister of Women and Child Development Smt. Smriti Irani has built her future from the ashes of future through education.

Former President A.P.J. Abdul Kalam used to sell newspapers. The quest of knowledge and "fire in his wings" took him above the levels of deprivation.

There is no doubt that the purpose of economic sufficiency served by education gets a long way in eradicating poverty of a nation. The graph which follows this paragraph paints India's experience in this regard. Moreover, the very first Asian country to follow modern education and industry (Japan), rose to become a major power in the world.

India's Journey to Glory

B.R. Ambedkar who was himself a victim of socio-economic poverty warned the Constituent Assembly in his concluding speech. He said "we are entering into a life of contradiction. We have given one person, one vote, one value in political sphere, however we fail to provide one person, one value in social sphere".

The social poverty manifests itself in the form of social injustice meted out to marginalized sections. Caste equations still hold strong in rural India and every months we read about many manual scavengers dying.

Education in this context will not only enlighten the dominant castes but also empower the lower castes people. The Affirmative Action taken by Indian state has improved the situation somewhat.

The more widespread social poverty has been the global disempowerment of women. UN Report 1980 found out that "even after being half in number, women did 2/3rd of work, received 1/10th of wages and only held 1/100th of the world's assets".

The role of education has improved this scenario. NITI Aayog in its last report mentioned that all women related indicators have been improving with improvement in education.

One of the biggest factors of poverty in India is the menace of overpopulation. The educational campaigns of last two decades regarding family planning has started showing results and Total Fertility Rate (TFR) will stabilize soon.

The much anticipated environment vs. Development debate has a context of environmental poverty attached to it. Millions in world are getting displaced not only because of developmental activities, but also because of climate change.

Education in this respect can not only bring in the concept of Environment Impact Assessment but also can help better relocate and rehabilitate the affected ones.

Education has played immense role in eradicating the ethical poverty since ages. The ancient legendary scriptures like Geeta, Quran etc. are much needed to guide the value based education in the world.

IS EDUCATION ENOUGH?

India has been a classic case study where proliferation of modern education has far outpaced eradication of poverty in absolute terms Hence there is surely much more that we must take into account while designing an antidote for poverty.

Formal education must be based on the concept of 'Earning while Learning'. It's time to bring a skill revolution in this country. Further, gender disaggregation of data sets can help us better target the poverty.

Many other flashpoints like malnutrition, high health expenditure, water crisis, safety of women etc. play a pivotal role in increasing economic productivity of people. This must also be put into antidote. Further, the idea of economic circle of power (Gandhiji), Idea of Radical Humanism (M.N. Roy) and the ideals of Sarvodaya and Antyodaya point towards the same thing.

Empowering Direct Democracy at rural level is highly effective antidote. The successful example of Hiware Bazar which not only empowered people but also modernized village and rejuvenated the environment.

As a last antidote, we must avoid the blind pursuit of crude capitalism which not only accentuates inequality but also ignores human dignity.

A unique index of how much one has taken and how much one has returned to the society must be designed. This will foster a sense of trusteeship in rich and satisfaction in poor.

History has taught us that poverty anywhere is a threat to prosperity everywhere. Education being the major component, an antidote to poverty must be developed so that IAS Officers like Laxman who rose above poverty can lift millions out of it by good work.

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The Higher We Are Placed, The More Humbly We Should Walk

Himanshu Kaushik, IAS (CSE 2017)

"With great power comes greater responsibility". One who is at the top of hierarchy, one who enjoys power is a source of inspiration for many. He is seen as an ideal; hence his responsibility towards society increases. Though each should have virtue of humility yet, humility is the most important aspect of a leader. He cannot have high headedness and sense of arrogance and prejudice. It is true that power corrupts and absolute power corrupts absolutely. Hence, to remain humble, one must avoid ignorance. He should make knowledge a real virtue. An ignorant, corrupt leader makes the society regressive. The importance of real knowledge was recognized by ancient philosophers like Plato who wanted a "Philosopher King". A king who has access to real knowledge and who does not consider materialistic world as reality.

In modern times, inequality and prejudice are on rise. Those enjoying power must empathies with powerless common citizens. We see the emergence of power centres in several spheres of society, starting from the first institution of family to the level of International Affairs.

In a family which is the first institution of social interaction, the head of family is a power centre. He is a father figure, economically independent, experienced and usually commands respect. It is his role to guide the family. His actions determine the level of unity and integrity in the family. Disagreements are bound to occur in a family, majorly due to "generation gap". If the head of family is not accommodating, intolerant towards contrasting view, it will drastically reduce the integrity and unity of family. His own respect would reduce. Each and every child expects support from his family head, but if his family head is not open, tolerant then the child is bound to suffer. Family head should take tough decisions when required but only for genuine reasons and for greater good.

A society becomes the second institution after family where power is enjoyed by a certain section. In an egalitarian society, such a section looks after welfare of all other sections. However, in a diverse society like ours, power is enjoyed by few which lead to exploitation of others. Caste system presents the most suitable example where prejudices and discrimination against weaker sections exist, leading to years of subjugation which further affects the unity and integrity of society. In such a system, members from upper

caste limit the opportunity provided to weaker sections. They are not even allowed to visit temples. This system reflects the level of arrogance and apathy towards weaker sections.

When it comes to Nation, the Prime Minister or the President is usually the one enjoying power supported by other ministers. As Chanakya said, a leader should not be corrupt and selfish. He should not be lazy, arrogant and heartless.

We have plenty of examples of arrogant leaders not caring about citizens, going on a killing spree, putting whole humanity into danger. The dominating ideologies of Nazism and Fascism led the humanity into a World War. Arrogance about being in power perpetuates such violence and mass killing. Fortunately, in India, we did not experience such brutality after Independence. However, those who are in power continue to exploit the weak.

The banning of red beacons by the Government are some steps taken to reduce VIP culture prevalent in the society. It is said about India that we are freer than we were before Independence, yet not that free which our forefathers hoped for.

Similarly, in case of International Affairs, the basic idea has been to dominate since ancient times. The respect to rights of humans has not been there. Old colonial powers traded slaves for their benefits, exploited them, annexed countries, exploited natural resources to sustain industrial revolution. All this was done without any regard for welfare of other humans who were probably different in culture, tradition, race and religion. In modern times, everyone wants to establish itself as hegemony, first it was UK, then US. The rise of superpowers is not without bloodshed. US became a superpower after dropping Atom Bombs over Japan, such blatant disregard for humans arises from ignorance. It can be argued that a superpower needs to dominate to maintain world order, but using smaller nation as a means to achieve own goals is not good.

The disregard shown to environment has already resulted into world wide environment issues like climate change, Ozone hole etc. Economic superpowers are running away from their responsibility and putting the burden on underdeveloped and poor nations to mitigate climate change.

Human beings can be less cruel and more appreciative of other species. Our activities are harming them such as death of Corel reefs. Those in power need to think and realize the importance of humility, brotherhood to respect dissenting views, to respect nature and its resources.

A humble leader can bring about a change in his centre of influence A father who teaches his child to respect women can start a change to remove patriarchy. A social reformer like Raja Ram Mohan Roy can bring a change into Ethics of Society, ending the evil practice of Sati. A national leader can ensure welfare of all; he can create on an egalitarian society. Environmental issues can be mitigated if leaders start respecting the

resources we are left with. As Barack Obama once said, we do not inherit the nature and its resources from ancestors, we borrow if from our future generation.

A world where peace prevails can be achieved if human rights are ensured in every policy decision. It is up to the man to decide whether he wants to live a happy life or a life in greed and need.

Those enjoying power needs to realize that it's not your position; it is your conduct that makes your superior. Hence, one should always be a guiding light rather than a source of darkness.

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28 Poverty Anywhere is a Threat to Prosperity Everywhere

Himanshu Jain, IAS (AIR 4 CSE 2019)

Governments across the world have become welfare oriented with their primary goal to uplift millions of poor people out of poverty. Even at the international stage, the Millennium Development goals and now the Sustainable Development goals are directed to eliminate poverty and provide basic minimum to all. Also, Indian Constitution in the form of fundamental rights, fundamental duties and directive principles of state policy seeks to ensure basic rights to all and prevention of concentration of wealth. Thus poverty is something big. What is poverty?

Poverty means lack of opportunities. The inability of people to have what is considered necessary for survival. But there is no one definition of poverty. It has been changing over spatial and temporal zones. Over the years, societies have advanced, what was earlier considered luxury may now be called a necessity. The definition of poverty changes owning to a number of factors like level of economic development in the country, advancement of technology, availability of resources, social structure, etc. So, when in the past owning a concrete house was considered a luxury, now it has become a necessity. In the recent times, when owning a mobile phone was a luxury, it has become a necessity now. Similarly, over spatial/geographical areas across the world, one standard of life may be considered as rich in one society and poor in another, for example: social security in USA is an essential requirement but similar insurance in Africa may be luxury thing. Thus, societies can be relatively rich and relatively poor. But when people are unable to meet basic requirements of survival, food, clothing and shelter that is absolute poverty. It can be dangerous. Absolute poverty is manifested in many forms:

Hunger and Malnutrition: Poverty means lack of resources to feed the hungry. Thus, poor tend to be malnourished.

Disease: Poor people live in unhygienic societal conditions which make them vulnerable and prone to diseases, more to communicable diseases.

Lack of Education and Skills: Poor people do not get adequate schooling, hence they lack proper knowledge and awareness which may be necessary in day to day living.

Fear: Fear and lack of confidence are two major forms in which poor people exhibit their helplessness. Poor tend to lack confidence to claim what is their own.

No Hope: Poor tend to lose hope for a better life since they get used to it.

Thus, a vicious cycle of poverty sets in where people over generations go through similar treatments at the hands of those who are rich or who have power.

Consequences of poverty are:

Discrimination and lack of aspirations result from chronic poverty. Overtime, the feeling of non-inclusiveness gains weight. Then expresses itself to the world in diverse ways. The prosperous cannot be peaceful without prosperity of the poor. This threat to peace has been persistent over the history and has expressed itself several times. Be it the 'Kalyug of the 4th or 5th century, where poor and caste discriminated people revolted against the Brahmin order. Or be it communalism by Marx which grew as retaliation to the oppression of the poor working class by the capitalist. This struggle is still on in the form of larger struggle in United Nations, where poor and third world nations are demanding fair share in the organizations which are dominated by rich, developed nations. Thus, long term poverty can have grave consequences to the peace of all. Examples of poverty leading to destruction of prosperity are present in the present world.

Left wing extremism in India developed as a consequence of lack of opportunities and poverty. These people came in contact with an ideology and turned to violent means to claim resources. Thus, this is a fine example of poverty anywhere is a threat to prosperity everywhere. As it has put on hold the growth story of a number of states like Jharkhand, Odisha to name a few.

Similarly, it is poverty which pushes the Kashmiri youth towards stone pelting. This is due to lack of resources that people protest in violent ways.

Outside India, in neighbouring countries of India poverty in Pakistan has made it to fall into Chinese trap. Pakistan is now a full-fledged state destroying the prosperity of adjacent regions.

In West Asia, concentration of wealth in few hands has made it prone to external interventions and has turned it into a war torn country/region.

Apart from these, there are people who become poor due to special circumstances for example climatic refugees people who will have to leave their lands due to rising sea level and migrate to safer places. The Rohingyas who are a result of state-led ethnic cleansing. These people eventually will have to be accommodated otherwise they can pose grave danger to the prosperity.

Thus, we observe that poverty in one region halts the growth of other regions and if not treated in time it may regress the process of development, for example terrorism leading to loss of men, material and money. Or the left wing extremism, occupying a lot of resources which could be utilized for developmental processes.